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CHOLERA INFANTUM AND SUMMER DIARRHŒA OF CHILDREN.

By P. H. BROTHERS, M.D.,

ZULA, ALA.

Read before the Calhoun County Medical Society.

This complaint usually affects children between the ages of three months and two years, though instances frequently occur before and after the ages above mentioned. In the most violent cases the vomiting and diarrhœa begin simultaneously, and in fatal cases the vomiting continues to near the end. In the worst cases the vomiting and purging are almost incessant; the stomach rejects everything swallowed. The intervals are marked by great languor and distress. If relief is not afforded, prostration comes on, with a cool and clammy skin, pallid and shrunken features, half-closed eyes, insensibility, and death in from one to three days. In most cases that recover, the vomiting ceases, and the diarrhœa, attended with fever, becomes chronic. In other cases the affection appears to be gastro-intestinal, attended with high fever, occasional vomiting, the diarrhœa persistent, the dejections are watery green or slimy and excoriate the external parts. In another class of cases the affection is either enteritis or entero-colitis, the dejections in these cases containing gelataneous or stringy mucus, frequently tinged or streaked with blood. Vomiting is not prominent in these cases. Progressive emaciation and debility mark the unfavorable progress in its downward course. Head symptoms sometimes appear, the child becoming dull and somnolent, lying with the eyelids partially closed. In still other cases the affection appears to be confined almost exclusively to the large intestines. The abdomen is generally distended, though occasionally flat

and boat-like. The latter I consider a very unfavorable symptom. In fatal cases the vomiting occasionally continues to the end, but more frequently it ceases and leaves a diarrhœa, which runs on until it wears out the patient. In the progress of the disease the child emaciates, the flesh becoms soft and flabby, the features shrink, the eyes become sunken, the whole surface pale and cold, and death ends the scene. The duration of the disease varies from a few hours to weeks or months.

The principal cause of the disease is warm weather, as it prevails almost exclusively in the spring, summer and fall months, being most prevalent in the hot months of June, July and August; very rarely in winter. The excitant causes are dentition, exposure to cold from insufficient clothing. Improper food is also a frequent cause of the disease.

The negro, though not entirely immune, is comparatively exempt from the disease. The idea of all authors that I have read on this disease that it prevails only in cities, is contrary to the personal experience of the writer from long observation. I am sure it prevails extensively in the country, as well as in cities. The nature of the disease appears, from the symptoms, to be a gastro-enteritis, directed to the mucus follicles and a deranged or engorged liver.

In the treatment of the collapsed cases of this disease, the mustard bath is very valuable, made by enclosing a sufficient quantity of ground mustard in a muslin bag and squeezing this in the water of the warm bath until the latter is sufficiently impregnated to produce an irritation on the surface of the little sufferer. It should be kept in the bath for fifteen minutes, or until the mustard causes some tingling of the surface, and may be repeated. An injection should be given of warm salt water. From twenty to thirty grains to a pint of warm water should be injected, so as to wash out colon, and this may be repeated if necessary. Calomel should be administered in doses from one-fourth to one-sixteenth grain, so that not more than two grains should be given in twenty-four hours. Opium is a valuable adjuvant in this disease, but must be used with much circumspection. The dovers powder is my favorite in this disease, though Bateman's drops, paregoric or laudanum may be used. I have never given morphine in this disease. Creosote, one to two drops in mucilage, is sometimes very serviceable in allaying vomiting. Bismuth in scruple to half drachm doses sometimes proves remarkably serviceable. Acetate of lead and tannic acid are valuable in the chronic cases with continued diarrhœa. The vegetable astringents also prove serviceable where tonic and astringent substances are called for. The antiseptics have not proved very serviceable in my hands. I have no experience with tanalbin, so highly lauded by Professor Moody, of the Alabama Medical College.

TREATMENT OF BURNS, WITH REPORT OF CASES.

BY H. N. ROSSER, M.D.,

BIRMINGHAM, ALA.

Read before the Jefferson County Medical Society.

Mr. President and Fellows Jefferson County Medical Society:

If an apology be necessary for my bringing to your attention, or for me, a general practitioner, even presuming to write upon a surgical subject, it is because of its antiquity; for burns must have been received by those of so ancient a date that history pales into insignificance in giving an adequate record of events; also the present unsatisfactory advice given for the treatment of such accidents in the general works on surgery to which we have access. Besides, there is no telling at what hour of the day or night that the general practitioner may not be called upon to give aid and advice to some poor victim of an accident fraught with results of a most direful nature. There are no classes of accidents coming under the care of the surgeon or physician which taxes his resourceful energies and solicitous care more than that of extensive burns, and upon quite a number of instances I have felt my utter helplessness in emergencies of this nature, not having at hand the time-honored "Carron Oil," and in some instances, when ordering it by the gallon the lime water in stock was not sufficient, and on several occasions the strength of the remedy was not adequate to saponify the oil, thus giving me water of doubted purity and sometimes trashy linseed oil, and at best a remedy filthy in the extreme on the patient, and if not properly used, working harm instead of good.

With these excuses, I will rapidly bring to your notice the method by which I treat burns of a serious nature, and the relation of several cases, that you may be the better judge of the result.

In this paper I shall use the terms "slight" and "severe," instead of using the classification of Dupuytren, which, to me, at best is misleading and complicated, giving rather the extent of injury than classification.

Of course when we see a patient suffering from an extensive or severe burn, we have to contend with shock in every instance, and sometimes of so severe a nature that all sensation is obtunded, and the victim of the accident succumbs, despite our most assiduous attention and skill. In combatting shock, I have nothing to suggest other than is used in profound shock under other circumstances, remembering that children and the aged bear opiates badly, and if heroic doses of morphine are admissible under any circumstances, it is after a severe burn, and to the robust adult I do not hesitate to give from a half to a grain of the sulphate of morphine hypodermically, combined with not more than the sixtieth of a grain of atropine sulphate, and repeating the morphine in

quarter-grain doses every half hour until sensibility is so obtunded that my patient is comparatively free from pain. This I esteem essential, for without its lethian assistance I am satisfied that my patient on several occasions would have succumbed to the shock of injury.

It is always necessary, as near as possible, to ascertain the cause of the accident, and the duration of exposure to heat, that we may give a probable prognosis as to the final result of our patient's injuries. Thus, for instance, we find a limb burned, and upon inquiry, we find that it was caused by a flash of powder, or gas explosion, while the physical conditions would be the same as that of scalding water; yet the results of the accidents would be different, for the water remaining in longer contact with the surface, the deeper tissues would be more involved, and consequently graver would be the result. And so it is with brass and iron, and so it is under other circumstances and conditions; but the illustration seems to show the necessity of the suggestion.

Unfortunately, most of the cases to which I have been called, some officious person has hastily removed the patient's clothing, and in their haste, on several occasions I have found that not only the clothing, but the epidermis as well removed, thus intensifying the suffering of the patient and consequent shock. But if seen in time, I am careful not to remove any part of the clothing until I am ready to apply my dressings, or to come to a conclusion as to the extent of injury. Avoidance to exposure to the air is axiomatic, and no good can accrue from a hasty examination. In removing the clothing, the utmost care should be exercised by cutting or ripping up clothing at the seams, so that valuable garments can be repaired and avoiding slipping off vestments from the limbs, thus complicating the condition of the patient by the denudation of cuticle, as well as clothing; for I esteem it of the utmost value to retain the scurf skin if possible, for by so doing in surface burns resolution will occur before the removal of the primary dressing.

It is unnecessary for me to call your attention to the fact that burns may exist from a mere erythematous blush of the skin to the entire destruction of the soft parts and bones, and requiring special surgical interference. But my purpose in this paper will have been fulfilled when I will have given a general outline as they primarily come under the care of the general practitioner, relegating such to the care of the specialist for treatment.

In the treatment of this class of injuries I have a preference for the kind of dressing to be used, selecting a fine gauze or cheese-cloth; and some years ago, while resident physician at a coal mine in which, at times, we had explosions of gas (fire damp), I always kept on hand not less than ten yards of fine gauze, rendered aseptic by thoroughly baking in my stove oven to a light scorch and wrapping in parafine paper, en-

veloping the paper in which my gauze was retained. Excuse the digression!

I never use water of any kind in this class of accident, no matter how filthy my patient may apparently be, for heat has already rendered the parts thoroughly aseptic, and besides time is an important factor, and usually too much has been already consumed.

There are two things always necessary to take into consideration in the treatment of this kind of injury, viz., efficiency and cost. While the cost of an article in medicine in comparison to its efficiency cannot be taken into consideration, yet, when cost and efficiency are commensurate, it behooves us to economize to the utmost in selecting our treatment, as at best we have a long, tedious and expensive case on our hands.

The application in which I place the most confidence, when direct surgical interference is not indicated, is a 2 per cent. carbolized vaseline. If the apothecary has not the remedy on hand, I do not hesitate to procure the ingredients and make the mixture myself, for valuable time can be saved by so doing. An ordinary paddle and any receptacle are the only things needed. This I spread copiously on aseptic gauze, and apply to the affected parts. The result in my hands has been magical, relieving the intense pain almost instantly. To retain this dressing I can not too highly condemn the use of the roller bandage, as we are too apt to apply it too tightly, as in a few hours swelling always supervenes in the severer burns, and it becomes necessary for us to clip our bandages, and a roller applied to the body of a restless patient is almost impossible to retain. I have lately had this experience, therefore I prefer a broad retaining bandage of gauze slit in several places similar to a Scultetus, and folded over the body and retained in situ by safety pins, using shoulder straps and perineal bands. For the limbs I use a Scultetus as a retaining bandage. In a case recently treated by myself, I used the following retaining bandage: I first applied the carbolized vaseline on gauze, over which I applied a thin layer of absorbent cotton which was retained in place by an ordinary gauze roller bandage loosely applied. Over this two layers of dextrin bandage. I have never used a retaining bandage in this class of cases which gave me so much satisfaction.

Whatever dressing which I may select, I let remain for at least three days, unless there be an urgent necessity for its earlier removal, at the end of which time I redress with the same carbolized vaseline, after opening any blisters which have made their appearance or which existed prior to dressing the wound, carefully snipping off with scissors any sloughs which may have become detached, and usually if you have an extensive deep burn, you will have your hands full, while on the other hand many of the superficial lesions will have nearly cured and you can the more definitely determine the extent of injury.

I use no water in any of my subsequent dressings. Especially is that the case in superficial burns, as water is often painful in the extreme, and for the purpose of cleanliness, and I can assure you there is nothing more imperative in this stage of treatment, I depend upon the removal of sloughs as before mentioned, and pressing gently absorbent gauze over any areas bathed in pus or serous discharges, no matter how slight they may be, this I do once daily. I dress the wounds myself until all of the sloughs have been detached. For the deeper sloughs I apply pure carbolized acid on a swab and clean away debris, using scissors if necessary. During this stage it is well to watch carefully any constitutional symptoms which may arise, and the deeper the burns the more serious will be their portend. Fever (irritative) septic and possibly pyæmia to be determined and treated on general principles. After the slough has cleared and granulations are well up to the surface of the skin with appearances of healing, to hasten resolution I apply acetanilid to the granulating surface without fear of absorption and consequent systemic complications. I use the crystalized article and dust lightly over the entire surface of wound, regardless of extent, one drachm being sufficient to dust over an extensive surface. And I have never seen a better result from the use of any remedy.

I have given above an outline of treatment of burns, while extensive, yet not involving the connective tissue, muscles and bones. These require special treatment, and in the hands of the general practitioner, if not a skilled surgeon as well, will fare badly; therefore, after dressing as above, establishing thorough drainage, removing any detached slough and having arrived at a correct diagnosis of extent of injury, if we have the welfare of our patient at heart we will unhesitatingly call in the assistance of the surgeon.

The physician should be a person of resources, and it is well to have at our disposal several remedies, any one of which may be applied until we can procure the one of our choice. Of course the time-honored Caron Oil attracts our attention first, soda bicarb, white lead, first advocated by Gross, a difficult remedy to manage, but one of our best, relieving pain promptly. It is applied by using the pure white lead of the paint shop, reduced to the consistency of cream with linseed oil and apply with a feather or soft brush. Rubber tissue, 2 per cent. carbolized oil, zinc ointment with bismuth subnitrate, at best doubtful, starch poultice, spirits turpentine (this remedy is said to relieve pain and hasten resolution), ichthyol, one or more drachms to ounce of water, euophen, one to ten, aristol in ointment and dry, pieric acid, one and a half drachms, alcohol three ounces water one quart; calcined magnesia, potassium, nitrate, etc., etc. or any household remedy to exclude air. Many of these remedies I have not tried, but the mention brings us up to the present time in the use of the newer remedies.

The complications are neural, the thoracic and ventral cavities, or directly upon the parts affected, viz., cicatrices, contractions and fractures of bone. In burns of the head we may expect arachnitis, inflammation of the brain, congestion, ending in coma and death. Tetanous is also often a complication; also bronchitis, pneumonia, congestion of kidneys, inflammation of gastro-intestinal tract, with formation of ulcer of duodenum at pyloric end; but there are no positive means of detecting its presence until after perforation and a resultant peritonitis, inflammation may extend to colon and cause a severe diarrhœa, especially in burns of the chest and abdomen. Septicæmia and pyæmia have already been mentioned. Any of these complications may make their appearance, especially is this true in burns complicating the deeper tissues; therefore our prognosis should be guarded until our patients are well on the road to recovery.

The first case of any extent treated as outlined above, was that of T. J. White, thirty-six years old, a miner. While drying a squib he ignited it and in throwing it from him cast it into a full keg of powder, which exploded, and as he was mining with his shirt off, the entire upper half of his body was burned, including his neck, face and head. I treated him as above, with the result of not a scar. This was my first severe case treated with acetanilid and the two-percent. carbolized vaseline. This case occurred in May, 1895. In June of the same year S. T., aged 47, white, received a burn from the explosion of "fire-damp," both hands, arms, chest and upper portion of abdomen were severely burned. Treated him with the carbolized vaseline, with the result of perfect ease of pain. He recovered well from shock, and on the sixth day of injury, one of his countrymen who was vending a "cure-all" for burns especially, visited him and obtained the patient's permission to discard my dressings and use his instead. If they had stopped here, perhaps all would have been well, but patient and self-constituted doctor got most gloriously intoxicated, with the result of congestion of brain, coma and death of patient.

The next five cases which I shall report is still fresh in the memories of at least two of this Society besides myself. On the 12th of August there was an accident at one of our city furnaces in which five men, negro laborers, were severely burned by both steam and hot water. When seen all of them had been stripped of clothing, and in many places scurf skin as well. Two of them were burned over the entire surface of body, and one died from shock in twelve hours. The other lived for seven days, nor did he die until he was flayed alive. A more horrible condition I have never seen. This man died from congestion of lungs. The satisfaction in these two cases was that the carbolized vaseline relieved all pain, and when asked, "How do you feel?" "All right, Doctor!" was the invariable response. The remaining three received injuries as follows,

viz.: First, both hands and forearms to elbows with occasional small burns on other parts of body; second, forearms, arms, face and neck; third, essentially as No. 2, with the addition of the tops of both feet and nearly to knees. All of these were treated with the carbolized vaseline and finally with the acetanilid, with the happiest result, as at this writing all of them are up and at work without a scar of any size.

BURNS.

BY DR. IRA J. SELLERS.

In presenting this paper I do not propose anything new, but simply to call attention to some important facts in connection with this accident. No telling at what moment the general practitioner may be called to treat a burn in one of its degrees; therefore he should be alert to use every means possible to relieve pain and sustain the patient. But, we ask ourselves, what is a burn? It is a high grade of acute inflammation following the application of heat direct or indirect, dry or moist.

Varieties.—For convenience, we will divide burns into three varieties. The character of inflammation observed in these grades is governed by the exciting agent, its capacity for the absorption of heat, duration of contact and the susceptibility of the part exposed. Thus, solid substances and the fixed oils cause greater impressions than do volatile substances. Again, the palms of the hands and soles of the feet are dense, and are not so easily destroyed as the structures of the face and some other parts.

Effects.—The effect upon the system will depend largely upon the constitution of the person attacked, those of strong constitution being more able to withstand shock than those of weaker frame. A temperature slightly above the body temperature will cause a slight hyperemia (dermatitis ambustionis erythematosus) or first degree, which may disappear shortly after the exciting agent is removed with or without treatment. If the temperature be, say, 140 degrees F. to 160 degrees F., soon there appears vesicles and bulla, or the second degree (dermatitis ambustionis vesiculosa et bullosa), and destruction of the epidermis, the effect of which is not relieved for some days afterwards. At the boiling point of water (212 degrees F.) the parts attacked may be completely carbonized, resulting in the formation of eschars varying in color from a yellow to dark brown or even black; in other words, gangreen or third degree (dermatitis ambustionis escharotica seu gangrenosa). We may, and often do, see all three degrees in one single victim where large areas have been exposed, due to the fact that all the parts exposed were not equally susceptible or the heat was of greater intensity at one point than at another.

Symptoms.—These are both local and constitutional. The former may result in great disfiguration or destruction of tissue, while the latter depresses the vital forces or may terminate fatally.

Locally.—In the first degree the appearances are superficial, with hyperemia varying in intensity from a slight redness to pinkish red or even a brownish red. Swelling is present to a slight extent, and does not extend far beyond the limit of the parts actually exposed. This class of burns is produced by indirect contact with a flame, proximity of heated metals, escaping steam and the actinic rays of the sun. In the second degree, while yet superficial, may occupy the entire epidermis. In some cases the upper layers alone of the cuticle may be destroyed, while vesicles or bulla may be observed over the affected surface. In other cases the corium is stripped entirely of its epidermal covering, and particles of the membrane may be rolled into whitish masses. The vesicles or bulla may be produced by contact of the heated substances or indirectly by consequence inflammation. They may retain their contents or the constant flow of serum may cause a rupture, causing a constant discharge over the denuded surfaces. The true skin which is partially or wholly exposed shows a highly reddened surface, over which this exudation may be observed. The papillary vessels are deeply congested. If they rupture the flow of blood intermingles with the serum which gives it a red tint. Swelling is present and is governed by extent of surface and density of the parts involved. The effects of this form does not necessarily show to what extent they have progressed immediately upon removal of the cause, because of the systemic condition, pain being present in a minor or major degree.

By coagulation of the serum resolution takes place. This covers the entire part involved and is a fibro-albuminous covering. Beneath this new skin forms, and when it has almost reached its normal aspect, the covering falls off, exposing a delicate skin beneath. It may be months before this becomes normal in appearance. After healing the cicatrix is flat and thin and does not cause the disfiguration seen in the third degree.

In the third degree destruction may be superficial or deep, involving subcutaneous tissue, muscle and bone. We may see any size area involved. When the corium or subcutaneous tissues are exposed, a highly vascular condition is observed, with a constant flow of serum intermingled with blood. The dead tissues vary in proportion to extent of heat, length of contact, amount of surface involved and density of parts exposed. They may be thick or thin, large or small and hold on for varying periods. Where the surface is uncovered resolution takes place as in the second degree. Where the covering remains granulations spring up under the charred mass. Later this falls off leaving a thin, delicate skin resembling the foregoing. In the deeper burns, the surface in-

volved may be large or small and of varying depths. It may involve the muscles, blood vessels, nerves and possibly the bone. The charred mass covers the burned surface beneath. The bone may be entirely stripped of all its coverings. Here hemorrhages may be fatal. Fractures may complicate matters later or at the time of accident. About the edges of this variety both the first and second degrees may be observed. Dry heat and electricity are the agents usually producing this form. The shock is alarming, and death may follow in a short time.

The X-ray may produce a burn by close proximity. It may be either superficial or deep, and may appear in a few hours, or not until several days have passed.

Mucus Surfaces.—These may be burned by inhalation of flames, volatile substances, concentrated acids and alkalies.

Constitutional Effects.—The effects of burns of the first degree are usually slight, pain being present for a few minutes or a few hours after the exciting agent has been removed. In the second degree pain is great and lasts from a few days to weeks or even months. Shock may be slight where small areas are attacked, but where extensive, is great, at times becoming alarming and may end life in a short time. Again, shock seemingly may be delayed for several hours. In the third degree, death may follow in a few minutes and very little pain be complained of. In this form when the area is large, shock is present from the beginning, children suffering more than adults, females more than males, weak more than strong. In the second and third degrees the temperature may fall to 97 degrees F., 96 degrees F., or even 94 degrees F., as in one of my own cases which ended fatally in a short time. The pulse is weak, as is all the vital forces. From twelve to forty-eight hours the temperature begins to rise, and may reach 102 degrees F. to 104 degrees F., or even 105 degrees F., and runs a more or less irregular course for a week or fortnight. By this time repairs is taking place and the fever will usually disappear. However, in certain cases, it may run along for days.

Complications.—These are numerous and vary in intensity in different individuals and in different degrees. In the first degree we rarely, if ever, have complications of a grave nature, while in the second and third we have many. If the burn be about the head, neck and face, we may look for neural or thoracic complications, as well as arachnitis, tetanus, congestion of the kidneys, albuminuria, hemoglobinuria, spasm of diaphragm, contraction of the stomach, gastro-enteritis, followed by amyloid degeneration, has been noted.

Ulceration of the pyloric end of the stomach is probably one of the worst gastro-intestinal complications. Should perforation occur, peritonitis is the result. Sepsis, septicaemia, pyemia and erysipelas may be complications, and even end the life of the unfortunate victim. I have lost four cases in my own practice, all from second and third degree

burns. They are as follows: First, Willie M. Black, male, age 4 years, burn about one inch above pubis to clavical extending on each side as far around as the axillary line. Pain and shock was great, reaction prompt. In thirty hours was seized with convulsions, and died in six hours. Less than half an ounce of urine was obtained, and not a drop being voided voluntarily.

Second, Mary C, black, aged 10 years; powder burn from mammary line on left side as low as the umbilicus and one inch above clavicle around to the right side and behind to anterior border of scapula was extent of the burn, the right arm escaping injury. Pain very great. Shock was not what might have been expected, and reaction was good in 12 to 18 hours. Death followed in about 50 hours with convulsions. No urine was voided, and about three drachms obtained by the catheter.

Third, Mary S., white aged 11 years. The entire back and right gluteal region being involved. Shock was great, but in 15 hours reaction was all that could be desired. Patient rested well for 30 hours. Restlessness noticed at that time, and in 2 or 3 hours convulsions began. They made their appearance every 20, 30 or 60 minutes for 8 or 10 hours, when coma supervened and death occurred three hours later, or about 60 hours after the accident. About one ounce of urine was obtained by the catheter. I am positive no urine was passed in either of these cases. No analysis was made in either case. They were all of the second degree.

Fourth, Lizzie L., white, aged 6 years. Third degree, at least three-fourths of the body surface being involved, and died in a few hours, remaining unconscious from the first.

Cicatrices disfigure the parts and may cause deformities, and about the hands may render one or all fingers practically useless, but thanks be to science, the surgeon in our day of asepsis can almost completely prevent this complication. Epithelioma, calcareous degeneration, spasm of the glottis, pressure upon the nerve ending with neuralgia and key-locks may develop. Any form of talipes may develop. Ankylosis of joints, fractures of bone may be seen. As the streptococcus normally inhabits the skin and is hard to destroy, we may reasonably suppose that this bug in some form will be our worst enemy so far as bugs are concerned.

Diagnosis.—This is not difficult. To distinguish between the second and third degrees may require a most careful examination. Between burns and scalds the diagnosis can be made by the deep burn in the former and the comparatively superficial of the latter. In the former the hair is lost owing to destruction of the follicles and papilla. The train of symptoms and the history of the case will clear up any doubt.

Pathology.—I will not take up your time with this part of the subject in its various phases, but suffice it to say that every practitioner should be familiar with this part of the subject. For a study of this part of the subject, I direct your attention to special works.

Prognosis.—In the first degree we may say this is good. In the second and third degrees, where the area is small, it may be put down as good so far as life is concerned, always remembering possible complications. Children and aged people are more easily affected than in middle life, females more than males, and it has been said blondes more than brunettes. In burns of the abdomen we have the highest mortality, thorax next, neck, face and head next, while those of the extremities are least fatal. Furnacemen, foundrymen, glass-blowers, mechanics, plumbers and coke oven men suffer less than do bookkeepers and clerks. If one-fourth or one-third the body surface be involved, we should give a very guarded prognosis. Burns produced by copper, phosphorus, molten iron, etc., usually heal slower than do those produced by volatile substances. The length of time the parts are exposed should not be forgotten. The length of time required for repairs may be an important question in medico-legal questions. In second and third degree burns, death may follow, where much less than one-fourth the body surface has been attacked. In summing up, I would say that each case should be carefully studied from every point in giving a prognosis.

Treatment.—This is both constitutional and local. The constitutional treatment is directed first to the relief of pain, second the restoration of the vital forces at the time of accident and sustaining the system during the entire process of repairs. Pain should be relieved by morphia hypodermatically in one-fourth grain doses, repeated every fifteen to twenty minutes, until the desired result is obtained. Atropine and strychnine may be added. Hot whiskey is of great value. Carbonate of ammonia, caffeine, hot tea may be given. For the restoration of body heat the hot water bags should be remembered. The bowels should be looked after. Remember you may have your worst complication in the kidneys. Use every means that can be commanded to keep them acting. Let me impress upon you right here the importance of noting the condition of the urine every few hours. In some cases the patient may require an anesthetic for one or two dressings.

Local Treatment.—Here there is much to be contended with, for usually before your arrival some good Samaritan will have usually applied the local treatment freely, and it usually consists in coating the parts with lye soap, cooking soda and syrup, castor oil, soot and sugar and other similar things. It seems that one of the favorite home remedies is syrup of the blackest and dirtiest obtainable. After the removal of such undesirable material as best you can with a pair of scissors clip away all blebs to their very edge. I am aware that some will hold different views, but experience has taught me to leave none, besides what use can they except to harbor micro-organisms and especially the streptococcus pyogenese aureus and albus. Every so-called "blister" is a harbor for infection, as is the cuticle or any other loose masses. Apply

carbolic acid pure or in a ten-per-cent. solution or a two per cent. vaseline. My preference is the former. This relieves pain, coagulates albumen for a protecting coat and destroys micro-organisms, thus rendering the parts aseptic, which is most desirable. Cooking soda and boric acid are the most painful remedies I have ever applied, and I have abandoned their use. Bichloride of mercury is also painful, besides it produces blebs about the edges after a few hours, thus adding trouble. Prof. S. D. Gross many years ago advocated and used ordinary white lead paint. It forms a protecting coat, but becomes hard in a few hours and is rather hard to remove. Watery solutions should not be used. They are always painful and do no good. If any one is ever permissible, it is a normal saline solution at a temperature to suit the individual. White of an egg and sweet oil, lead water and laudanum, cold and hot applications all have their advocates. H. L. McInnis lauds spirits of turpentine. He applies a thin layer of absorbent cotton to the parts, saturates with the turpentine and covers with a bandage. When the parts have been cleaned and the agents applied (whatever they may be), some prefer to apply over this absorbent cotton, others oiled silk or rubber tissue. In my hands, rubber tissue has been most satisfactory. It gives no pain on removal, it does not disturb granulations, excludes air, and is quickest of all to remove. Many prefer to apply sterile gauze on account of drainage. Whatever dressing may be employed should be covered with absorbent cotton and held in place by a bandage loosely applied. This allows for swelling, does not disturb circulation and is least painful. Ichthyol, oxide of zinc, iodol, eucrophin, aristol, carbonate of magnesia and thiol have all been used with satisfaction. The two former are usually used as ointment, one in eight of vaseline. The others either as a dusting powder or as ointment, five to thirty grains to the ounce of vaseline. Iodoform should not be used, in my judgment, nor any iodine preparation. Their odor is usually disagreeable and they do no good, and the danger of poisoning is great. I came near losing two patients from the use of iodoform in burns of the second degree over comparatively small areas. Starch and bismuth have been used. Nitrate of silver in ten per cent. solution has been used with good results, but it has the disadvantage of coloring the skin. The time-honored caron oil should have the hearty condemnation of every practitioner; it is nasty and is worse than useless. Picric acid, a drachm to a pint of water, is a favorite with the French surgeon. It should be used with caution, notwithstanding the claim put forth of its non-toxicity. The urine turns very yellow in a few hours. Calcined magnesia and nitrate of potassium may be used. Acetanilide dusted very lightly over the surface is of value, but should be used as scales and not the impalpable form. When it is necessary to dress the wounds, the dressings should be removed with great care. Any excessive secretions or pus is best re-

moved by sterile gauze or absorbent cotton squeezed out of normal saline solution and gently pressed against the surface, care being taken not to rub. Should hemorrhage occur, it should be controlled as in other wounds. Cicatrices, ankylosis and other deformities should receive appropriate treatment by the surgeon. Personally all preparations of dusting powders which form a coating, ointment and watery solutions of all kinds have been very unsatisfactory. In the treatment of a number of burns from fire-damp and gun-powder, I learned to rely on carbolic acid, sterile gauze, rubber tissue, occasionally absorbent cotton and a bandage to retain the dressing. With this comparatively small armamentarium I had my best results. The idea of drying the wound with a dusting powder is erroneous. The physician rarely has the opportunity of removing the clothing, but when he does, they should be removed with great care. In large surfaces skin grafting should be done. A recently good result has been obtained by planting dry sterile scales of cuticle. This method is quickest and easiest of all. Curette the surface and render it aseptic, check all hemorrhage and plant. Protect for forty-eight hours, when if successful a small whitish point can be seen and grows very rapid. They should be placed from a half to one inch apart.

In burns of the mucus surfaces, the physician has to combat pain, render the parts as near aseptic as possible, and trust to nature to do the rest. In concentrated acids and alkalies, the antidote should be administered at once and the treatment is to be directed to conditions which may arise in each case; however, when large quantities of these drugs are taken, the physician usually loses his fee and the undertaker comes in for the treatment.

ACUTE ENTERO-COLITIS OF INFANTS.*

By WILLIAM WADE HARPER, M.D.,

SELMA, ALA.,

Member of the Medical Association of the State of Alabama.

Mr. President and Gentlemen of the Medical Association of the State of Alabama:

With the approach of the summer season, when intestinal disorders are so prevalent, I think it will be profitable for us to consider a disease that is so destructive to infant life. According to statistics, the majority of children die before their fifth year, and of the diseases that are responsible for this frightful mortality, the most conspicuous is enterocolitis. In this paper we will discuss only the acute form.

While the exciting cause is some pathogenic germ, bacteriologists

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have failed to discover the specific organism. In the stools the *stercococcus*, *colon bacillus*, and *aerogenous bacteria* have been found in large numbers, but which must bear the blunt of the blame is not yet decided. (Hare). The *colon bacillus* and the *aerogenous bacteria* are found in the colon and last two feet of the ileum of the healthy infant, and are not hurtful until the intestinal mucous membrane becomes irritated and inflamed. They then produce all the symptoms of an active toxemia. In this respect they bear an analogy to other germs; the *Klebs-Loeffler*, for instance. These germs are found in healthy throats and do no harm so long as the mucous membrane remains intact, but let there be a lesion of this membrane, and diphtheria is the result. Therefore, in addition to these direct, there must be predisposing causes. Of these the principal are, heat, over-feeding, and over-crowding. The exact part played by heat is not yet decided. Aside from the fermental changes which it produces, the thirst as a result of perspiration causes the infants to take more milk than they can digest. It is claimed, (Ballard), that an elevated subsoil temperature increases gastroenteric diseases. My experience tends to confirm this view, for, as a rule, I have observed, that my patients were better when a low temperature was immediately preceded by a rain. According to Seibert it requires a continuous temperature for 24 hours of at least 60 degrees F. to start an epidemic. The reason is, that with a lower temperature, pathogenic germs are dormant, but multiply and disseminate very rapidly with a temperature above 60 degrees F. As 90 per cent. of the cases of enterocolitis occur among those artificially reared, it is easy to see the great advantage possessed by breast-fed infants. That over-crowding plays an important role is shown by the greater frequency of enterocolitis in asylums, tenements, and populous centers.

Pathology.—The anatomical lesions are found in the colon and in the majority of cases, in the last two feet of the ileum. The reason for its occurrence in the last two feet of the ileum is the tarrying of the intestinal contents at the ileo-cecal valve.

Three forms of the disease are recognized; 1. Catarrhal. 2 Ulcerative. 3. Membranous.

In the Catarrhal, the mucous membrane is inflamed together with Peyer's patches, and the solitary follicles of the colon and ileum. The glands, through cell proliferation, become enlarged and quite prominent. Where these solitary follicles break down, the Ulcerative form is produced.

In the membranous variety, there is an exudation of fibrin that not only coagulates upon the inner lining of the intestines, but actually infiltrates this membrane.

Symptoms.—While the pathologist recognizes three forms of the disease, clinically, there is only one. The onset is usually sudden, with

vomiting and stools, varying in frequency from 5 to 6 to 20 or 30 in the 24 hours. At first these stools are composed of fermenting and undigested food, but in a day or two fecal matter disappears, and we have the characteristic action, mucus and blood, with lumps of casein. Every action is preceded by pain and accompanied by tenesmus. This pain is sometimes so severe that I have seen patients awaken with a cry. Where the tenesmus is marked, we usually have a prolapse of the rectum. The discharges are green in color, acid in reaction, and exceedingly offensive in odor. In the Ulcerative form, shreds of necrotic tissue are found in the dejecta and the odor is that of gangrene.

The characteristics of the third type is the appearance of the membrane in the stool, but even here, what often appears to be a membrane, is upon microscopical examination found to be mucus. This form of the disease is not common. The abdomen is tender and tympanitic. I have seen this distension so marked that it not only embarrassed respiration, but actually threatened rupture of the intestine. The temperature runs a more or less varied course. In mild cases from 100 degrees to 101 degrees, in the morning, to 102 degrees and 103 degrees in the evening; in severe cases higher. However, the temperature is not an accurate index of the pathologic changes, for some of the most extensive lesions have been found in those cases having had a low temperature; while with a high temperature few anatomical changes have been observed. (Holt). Not infrequently, cerebral symptoms are prominent; convulsions may be persistent, and are often the forerunners of stupor and coma. Deepening stupor sometimes develops without convulsions. Emaciation is rapid and in prolonged cases, the patient acquires "the facies of an old woman." The duration of mild cases is from two to four weeks. Convalescence is slow and relapses frequent. The most dangerous complications are acute pseudo-hydrocephalus and broncho-pneumonia.

Diagnosis.—We are to differentiate from acute gastro-enteric infection, typhoid fever, cholera infantum, and intus susception.

In acute milk infection, the temperature is higher and lasts only a few days. The stools are frequent and free of mucus and blood. There is no tenesmus. A more regular temperature with a macular eruption upon the abdomen serves to distinguish typhoid fever. Besides, typhoid fever is rare under two years, while interocolitis is a disease of the first year or two. (Holt). Persistent vomiting, serous stools, excessively high temperature with rapid and marked prostration serves to distinguish cholera infantum.

In ileus the diagnosis rests with the history of the case. Until the latter stages of intus susception when peritonitis develops, there is no temperature. At this stage the diagnosis is made clear by the persistent

stercoraceous vomiting. Most works on pediatrics speak of the abdominal tumor in invagination, but with a tender and tympanitic abdomen and a crying baby, I think most generally practitioners will experience some difficulty in finding this tumor.

The prognosis depends in a large measure upon certain conditions. Attacking breast-fed and robust infants, and those under healthful surroundings, the majority of cases will recover. Occurring among foundlings and the babies of tenements the mortality is frightful. The artificially reared city baby is in great danger unless taken to the seashore or country. The prognosis is unfavorable if the child is attacked early in the summer. Unless removed to the country and kept until cool weather, the infant usually perishes from a second or third attack.

Broncho-pneumonia and brain involvement are exceedingly dangerous complications.

Much can be done in the way of prophylaxis by educating mothers and securing much needed legislation. Mothers should be urged to nurse their babies, and where that is not possible a wet nurse should be secured. If breast milk cannot be obtained, good fresh cow's milk properly modified and sterilized should be substituted. This milk should come preferably from a herd. The proprietary foods should not be entirely depended upon as substitutes for milk. Mothers and nurses should be carefully taught how to prepare the feedings, the care of bottles, and nipples, and the disposal of napkins. It is a common belief among the laity that during dentition diarrhea is a physiological process, but they should be taught that every case of diarrhoea occurring in the summer, especially, needs prompt attention. In large cities, where the diarrhoea does not improve in a few days, the patient should be taken to the seashore or the country, and kept there until cold weather. The baby should be given plenty of cool sterilized water, and its diet should be liquid.

Treatment.—Dietetic. All milk should be stopped at once and withheld 36 or 72 hours. It is claimed that these germs thrive best on milk and soon die if the milk diet is discontinued from 24 to 48 hours. If there is much nausea, the stomach should have absolute rest from 12 to 24 hours. As soon as irritableness subsides, in lieu of milk diet, give albumen, rice and barley water and coffee. When beginning a milk diet again, the time between nursings should be lengthened and the time of nursing shortened. If using cow's milk the milk should be well diluted, partially peptonized and parteurized. Sir Wm. Roberts has called attention to the fact that milk should be only partially peptonized and the peptonizing discontinued as soon as the emergency is over; as it is better for the digestive organs to perform their functions. All cow's milk should be either pasteurized or sterilized. When milk is sterilized it is

altered in taste and the case is rendered more difficult of digestion. Flugge has shown that most pathogenic bacteria are killed at a temperature of 150 degrees F. to 160 degrees F., but the spores are not. Hence after pasteurizing the milk it is necessary to keep it on ice to prevent the hatching of these spores. Among the poor it is safer to boil the milk. Prof. Czarney advises boiling for ten minutes. According to the researches of Freeman, when milk is allowed to stand until the cream rises, a separate analysis of the milk and cream will show 99 per cent. of the bacteria to be in the cream; thus leaving the milk comparatively sterilized. He says "the practical bearing of this observation is important. If heating to 155 degrees F. is injurious to it as an infant's feed, the bulk of the bacteria present may be separated by natural processes from the milk by allowing the cream to rise and then pasteurizing or sterilizing the cream and afterwards mixing it with the comparatively germ free raw milk." Prof. Czarney claims that the too-long use of sterilized milk produces scurvy. Sonnenberg calls attention to this very important fact that in sterilizing milk we kill only the bacteria which are present, but do not render inert the toxina which they may have already generated, and it is therefore, necessary to sterilize the milk before these last changes have taken place.

Medicinal.—The indications are to clear the gastroenteric tract of its mass of fermenting food. For this purpose there is nothing better than a good dose of castor oil. If the stomach is too irritable to retain the oil, give 1-8 grain calomel every twenty minutes or thirty minutes until one to three grains, according to age of child, are taken.

Realizing that the principal seat of the disease is in the last two feet of the ileum and the colon, I do not want to protest against the use of the soluble antiseptics. They are of no use, but do positive harm by upsetting the stomach and interfering with digestion. If given strong enough to act as a germicide, they would kill, or put into abeyance every one of the digestive ferments.

I also desire to caution against the use of powerful astringents which are likely to arrest too quickly intestinal movements. Salol has many advocates, but it is not a safe remedy; cases of poisoning from it being frequently reported. Some practitioners have obtained excellent results from small doses of resorcin. Sonnenberg calls special attention to the tannabin preparations, claiming that they form inert chemical compounds with the toxins generated in the intestinal tract. The remedy which has given me the most satisfactory results has been large doses of bismuth, and as the dejecta are usually acid in reaction, I give the bismuth suspended in chalk mixture. To be beneficial, the bismuth must be given in large doses, ten to twenty grains, according to age, every two or three hours. The bismuth should not be given for too long a time, as it frequently forms concretions in the bowels which act as

irritants. Every four or five days it is well to give a dose of oil or calomel.

As to the use of opium, it seems to me that there are three special indications; first, pain; second, watery actions; third, very frequent discharges, showing the intestinal contents to be hurried along too fast for their proper digestion.

The opium should be given alone and discontinued when the special indication has been met. The contra indications are, cerebral involvement and offensive stools.

Along with these medicinal agents, irrigation of the colon should be resorted to once or twice a day. The only apparatus necessary is a fountain syringe and a large rubber catheter. For simple irrigating purposes the water should be tepid, and from two to four quarts used each time. The baby should be placed upon its back with hips elevated. Having well oiled the catheter it should be introduced into the rectum, which is slowly distended with water, when the catheter can be readily introduced its full length into the colon. As the colon fills with water peristaltic action forces the water out along the side of the tube. Unless the rectum is first distended with water, the end of the catheter catches in the rectal valves and it is with great difficulty that the tube can be introduced into the colon. This colon irrigation serves not only to flush out effete matter, but by substituting cold for tepid water, it is an efficient measure for reducing high temperature and relieving nervousness. By using very warm water we can relieve shock and depression.

Stimulants should be given from the outset, using preferably the best quality of whiskey; from one to three ounces well diluted should be given in the 24 hours.

For the tympanites use hot turpentine stupes, minute doses of calomel and change from a milk to an albumen diet; also use prolonged colon irrigation. I recall a case where a child was comatose and it seemed as if the colon would burst. After using two or three gallons of water flatus began passing, the distention was relieved, and the child recovered. Where restlessness is due to pain, an opiate is to be given. Where the opiate is contra-indicated give small doses of phenacetine. If the restlessness is from high temperature, nothing is so quieting as the use of baths and sponging. On many occasions I have seen infants put to sleep by simply placing them on a large bed and gently fanning them. Bromides by mouth or rectum are a most useful and simple sedative.

Where the temperature does not exceed 102 degrees, antipyretic measures are not needed. For the higher temperature we should not use any of the carbon group, but rely upon baths, sponging, and colon irrigation. The bath should be about 98 degrees and quickly cooled to 85 degrees or 80 degrees. The child's temperature should be frequently taken and should be removed from the bath upon the appearance of cyanosis, or

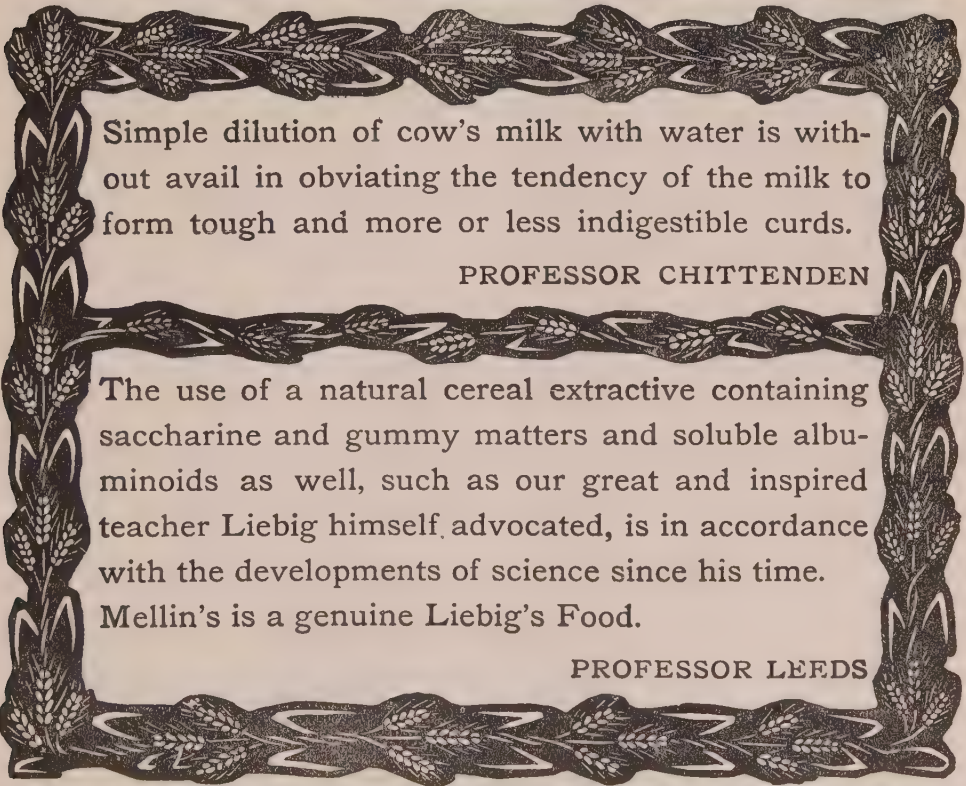
when the temperature reaches 101 degrees, remembering, that the temperature will fall a degree or two after removal from the bath. The duration of the bath should not exceed 10 minutes. A crying baby will often go to sleep in the bath. A pale skin and cool extremities are contra-indications to the bath.

Upon evidence of brain irritation, apply an ice cap and give the bromides freely; also chloral guardedly.

Within the past few years, there has been brought to the notice of the profession a remedial agent, which promises to have a wide field of usefulness. I refer to the subcutaneous injection of the normal sterile salt solution. Its indications in ileo-colitis are: 1. To relieve the prostration; 2. To prevent threatened acute pseudo-hydrocephalus; 3. To wash as it were, from the tissues the toxins of the disease; 4. To act as a hydrogogue diuretic. Upon these latter points Halstead says that he has seen a most rapid toxemia from renal insufficiency relieved quickly by hypodermoclysis. In giving the injection he says, "a graduated fountain syringe is perhaps the best instrument for the purpose, an elevation of about four feet above the patient being sufficient. A half hour or more may be taken for the injection, the patient sometimes falling asleep while it is being made." He "cautions against giving the infusion of salt solution too rapidly, for the tissues may be damaged by it, that annoying and even serious consequences may result." He cites "two cases in which gangrene followed the too rapid or too forcible injection of the solution. In both instances considerable force was exercised and the injection was in neither case discontinued until after a large, perfectly central area, surrounded by a loid zone had been produced."

In conclusion, I desire to call your attention to an agency yet in its experimental stage, but which I believe is destined to play a most conspicuous part in the treatment of summer diarrhoea of infants. I speak of liquid air. If it is true that these diseases are due to germs that do not multiply and disseminate at a temperature below 60 degrees F. is it not highly probable that by producing an artificial temperature in the room or house below 60 degrees F., that the disease will be arrested? As soon as liquid air can be manufactured cheap enough for commercial purposes, I believe that here is a field where experiment can be tried which will be of lasting benefit to generations yet unborn.

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Unlike most of the liquid preparations of beef, which contain only that portion of meat soluble in water (or in other words, the stimulating portion of meat), it contains also the fibrin or nutritious principle combined with the stimulating juice and salts, and is free from fat. It is most grateful to invalids, and is particularly adapted to convalescents in recovering from debilitating fevers and other diseases.

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One teaspoonful represents, or is the equal of five grains of the sub-nitrate. It is employed for its soothing, sedative, and feebly astringent influence upon the mucus membranes, and can be combined with alkalies, anodynes, astringents, etc., but not with acids; try it with Tincture Opium and Tincture Kino or Catechu, or with Rhu-barb and Pancreatin.

It is useful in sub-acute gastritis, gastralgia, pyrosis and allied stomachic diseases, irritation of the intestinal and urethral mucus membranes, Diarrhoea, Dysentery, Leucorrhoea, Gonorrhoea, etc. It is suggested to use egg albumen mixed with Bismuth Cream for injection in catarrhal conditions.

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Selected Articles.

A PASSING NOTICE OF THE THERAPEUTIC APPLICATION OF PSYCHOLOGY.

BY WILLIS B. PARKS, M.D.,

ATLANTA, GA.

We might say at this advanced time that we are soaring on the wings of progress; the "wings" are tipped with "faddism," and after the shining luster of the tips are worn off, from beating hard against reason and actual experiments, minus theory, we may expect to still soar on the wings of progress not having been worsted by the faddisms, but rather the better "for the wear."

In presenting this subject of therapeutic psychology, I am aware that the medical profession have been more or less disgusted, and, I may say, discouraged, from properly investigating this subject on account of the element of unscrupulous quackery and charlantry in advertising unreasonable results by psychological methods in the treatment of nearly all diseases to which mankind is heir. Yet all this should not deter us from an earnest scientific investigation of methods and means that might alleviate some of the many ailments of our patients, for if Lister had even hesitated at mock derision, antiseptic surgery might not have been developed and perfected as it is today; if Massey had left electricity in the hands of the quack, we would not have known its valuable uses by electrolysis and cataphoresis; so, too, serum-therapy would have fallen in the face of severe criticism, and thus it has been all along the line of improvement of every department of progressive medicine.

Therapeutic psychology stands today at the threshold of the medical profession, waiting for a legitimate and honest investigation.

I will presume to show that some progress has been made, especially since Hudson has introduced his work on "New Psychology," a work which has greatly simplified the subject, relieving very much the mysterious and the metaphysical and unknowable something that has seemingly been shrouded in mystery as taught in the old empirical psychology.

In order to simplify the "New Psychology," as taught by Hudson, we will first view it synthetically. Admitting the duality of the mind, the one he calls the objective mind, the other he calls the subjective mind; or, from an anatomical standpoint, we may call the first voluntary mind, and the other we call automatic mind. The objective, or voluntary, mind includes all the reasoning faculties and all conscious perceptions that come through the five senses. The subjective or automatic mind is

that mysterious something that physicians usually call "vis-medicatrix-naturæ." Hence, we have the synonymous terms subjective, automatic, involuntary and vis-medicatrix-naturæ, meaning one and the same thing, which is the part of the duality of the mind that we are supposed to impress or persuade or stimulate when medicines are given, or remedial agents are applied to our patients. All physicians will readily acknowledge that the desired effects of medicines given, and agents applied, depend greatly on the confidence the patient has in the physician and the medicines. This word, or term, "confidence," we will beg leave to define nothing more than "suggestion," granting that the privilege is given to change the term "confidence" to "suggestion." Then all physicians are dependent and constantly using "suggestion" to stimulate and reinforce the automatic mind of their patients in the relief of their many ailments, and we will presume to say that doubtless suggestion often takes the lead, as proven in the happy effect the astute physician often gets when he confidently administers his "placebo."

In summing up the synthetical part, of objections are made to the duality of the brain or mind, we will concede that there is one brain with two sets of functions, viz.: automatic and voluntary, which amounts to the same as duality.

In presenting the analytical part of the subject, we will, for the benefit of those physicians who are materialists, offer a few points of anatomy now accepted as true. Mills, in his recent work on the Nervous System, says: "It has usually been taught that the nerve cells and nerve fibers are different structurally. Strictly speaking, this is not true. They are," he says, "parts of the same histological unit, as has been shown by recent investigation." By this he means that the nerve cell and the nerve fiber are one entity, the neuron. "Each neuron is a single entity with physiological connection only with the other cell or neuron." Now, according to Schafer's Cellular Terminology, each neuron has two sets of processes: the one axis-cylinder called neuraxon, and the other processes are protoplasmic. He calls them dendrons. It has been shown that the protoplasmic dendrons convey impulses toward the cell, which corresponds to voluntary life; the axis-cylinder, or neuraxon, convey impulses away from the cell, which corresponds to automatic life.

It will appear from the above facts in regard to cell structure of the nerve, also with its cellular terminology, that we also have the duality of the brain or mind, as Hudson teaches in his "New Psychology," but we have the same corresponding voluntary and automatic feature through all the nervous system. Hence, it will be seen that the object of so elucidating this subject of therapeutic psychology is to maintain it and apply it to the undisputed rules and facts of anatomy and physiology, where all therapeutic agents have their origin and application; then we will be

permitted, without violating our preconceived ideas of the imaginary line drawn between the physical and the metaphysical, to use or apply psychology in the practice of medicine when indicated.

For those who are skeptical as to the efficacy of psychological suggestion in the practice of medicine, I will attempt to explain the *modus operandi* of this valuable agent as it is used by those who employ it intentionally, as also the same laws are used by those who get the benefit of it unintentionally, the latter, though, at a great disadvantage for lack of the necessary technique.

In order to make matters clear, we will classify the cerebellum, basal ganglion and the spinal cord as the automatic or involuntary mind. The cerebrum represents the voluntary mind. Now, if we wish to get a subject into the proper condition to receive "suggestion," we will cause fixation of the eyes of the patient to be treated on some indifferent point. This is the first step to render him passive, because impressions from the eyes go first to the basal ganglia, thence to the voluntary brain center. If we wish sleep to occur we will prolong the fixation of the eyes, which increases the stimulation of the basal ganglia, and as it is connected with the cerebellum and the spinal cord, which includes all the automatic machinery, all of which will be stimulated and become dominant and ready for any suggestion we make, provided life and liberty are not called into question.

As all growth, nourishment and repair, from the least cell to the mightiest organ tissue, is dependent on the automatic brain, is it any wonder when strong suggestions are brought to bear on the automatic brain, when the voluntary brain is passive, that we control many neurotic conditions that have their origin from a perverted condition of both automatic and voluntary life?

It will be remembered that it was intimated in the first part of the subject that we are dependent on the proper stimulating of the automatic brain to get the desired results, whether it is done through medicines, electricity, etc., or by "suggestion."

THE USE OF HYDROZONE AND GLYCOZONE IN GASTRIC AND INTESTINAL DISTURBANCES.

W. H. VAIL, M.D., PHYSICIAN AND SURGEON,

Medical Examiner for Fraternal Mystic College, Philadelphia, Pa., Assistant Editor St. Louis Hospital Bulletin; Visiting Surgeon to Mayfield Sanitarium; House Physician for Wm. Barr Dry Goods Co.

I have for a long time been rather enthusiastic over the value of Hydrozone and Glycozone in treating diseases, and can attribute much valuable assistance and extraordinary results from their use in the last few years. The medical profession, in fact, has never gained such re-

markable results from the employment of any production as it has from the use of these preparations, and my recent effects have almost, in a measure, surpassed them all. I will give a brief report of one remarkable case. I could mention several others, but a physician's time is valuable, and often he has not the moment to spend in perusing a legion of cases, so I select this one, it being the severest of all, to demonstrate the potency of Hydrozone and Glycozone:

I was called to treat a young man, suffering from a severe gastro-enteritis. I found him in a most serious condition, having been delirious for three days. His temperature was sub-normal, 97.6, pulse 60, respiration 16. He was greatly emaciated, atonic, had inappetence, a severe agonizing pain in the stomach and intestines, at times so severe that he would sit on the edge of the bed and groan, oftentimes yell. These attacks were always of a similar nature and occurred regularly. He was unable to take either solid or liquid food, even in small quantities without causing a return of the pain, a teaspoonful of milk being sufficient to produce it. His condition was pitiable. His cheeks were hollow, eyes congested, skin pale and sallow, and his whole appearance showed the presence of intense pain.

I was called at the end of the third week of his illness. The former physician had employed opiates in large doses with most worthless results, also many other drugs with not a sign of improvement, he growing seriously worse. I determined that Hydrozone and Glycozone were the remedies indicated, and were the only ones that would be of value here, therefore, I gave him at once one-half glass of a mixture of one-half ounce of Hydrozone with a little honey to one quart of water. He was somewhat disturbed for awhile after the portion, but was soon relieved. The distress, I presume, was due to the advanced stage of the inflammation. I continued to administer this for some time, with only a slight improvement, but after several doses had been taken, the relief was very decided. After this nourishment I gave one teaspoonful of Glycozone in a wine glass of water. After a few doses of this, he was much easier, and at midnight fell asleep and slept all night, not awakening until morning, the first sleep that he had had in five days. I had previously discarded all other remedies, of which there was a large number, as one after another was given with no benefit. All of the acute symptoms disappeared in a few days, at which time he felt very much better, and he continued to improve without having a recurrence of any of his old severe symptoms. Before this, I had increased both the nature and the quantity of his food which he relished greatly. I continued the Hydrozone and Glycozone for a month after, to entirely reduce the inflamed condition of the mucous membrane of the gastro-intestinal tract.

These two remedies have afforded me most excellent issues many times in the treatment of gastric and intestinal disorders.

All gastric and intestinal disturbances are caused by the lining of the stomach becoming inflamed, and in order to allay this inflammation, it must first be treated with antiseptics then with medicants that both heal and stimulate the mucous membrane that has become diseased. The most common cause for this state of inflammation is a greatly diminished quantity of gastric juices necessary for digestion, consequently, the food partaken of, instead of being assimilated, ferments; in other words, the peptic glands, whose function it is to secrete the gastric juice, do not perform their function properly. These must be restored to their normal state at once, which is accomplished by remedies that exert a stimulating effect upon them, and at the same time are non-toxic, else the trouble will only be aggravated. Hydrozone and Glycozone are the two remedies par excellence for these two purposes, and the success that I have obtained from the employment of them during the past few years will lead me to always use them in these disorders.

Hydrozone causes destruction to microbes, has no deleterious action upon animal cells, possesses no toxic qualities, exerts no corrosive effect upon healthy mucous membranes when used in diseases caused by germs, is a pus destroyer and a stimulant to granulating tissues. Hydrozone is destruction itself to the skin or mucous membrane that has become diseased, and leaves the subcutaneous tissues in a perfectly healthy state.

Glycozone, while not so rapid in its action as Hydrozone, is, nevertheless, just as sure a stimulant, and in all gastric and intestinal disorders, exerts a potent and uninjurious effect upon the diseased mucous membrane of the stomach, healing it to a nicety. It is an effective oxidizing agent, has an agreeable, sweet and at the same time slightly acid taste, resembling lemonade. Its use produces no deleterious action on the heart, liver or kidneys.

The beneficial results which Hydrozone and Glycozone have afforded me in the treatment of this class of disorders have caused me to discard all the other methods of treatment by drugs that exert an ephemeral influence but do not jugulate the offending condition. What is needed in these diseases is an antiseptic that will destroy all pathogenic germs, and at the same time stimulate the walls of the stomach. Hydrozone kills the bacteria, dissolves the mucous and prepares the stomach to better digest the food; in short, it deterges the stomach, hence in it we have an efficient antiseptic. Glycozone removes the mucus from the walls of the stomach, stimulates and heals. I have discovered these two preparations to be ideal ones in treating this very common and distressing disorder.

St. Louis, Mo.

PNEUMOCOCCUS INFECTION.

Dr. Frank Billings (Western Clinical Recorder, March) thinks that all recognized pathologists and clinicians are now agreed that Fraenkel's diplococcus is not only the cause but the only cause of lobar, croupous or fibrinous pneumonia, even though in perhaps 10 per cent. of the cases it may never be discovered. Pneumonia is an acute infectious disease, characterized usually by a local inflammation of the lung with an associated specific toxæmia. The lung manifestation is so frequent that the name pneumonia is still adhered to, but Dr. Billings thinks that the obsolete term "lung fever" expresses the pathological process much more clearly. It is a recognized fact that pneumonia may occur without pneumonitis. This is better expressed as a pneumococcus infection without any involvement. The infection may occur as a septicæmia or as a pyæmia alone, or as a septico-pyæmia. Many autopsies prove this. Toxæmia occurs in these cases, producing fever with disturbance of the cardio-vascular system, of the secretions and excretions and of the nervous and digestive apparatus of the body, as in ordinary pneumococcus lung involvement. This proves that the disease is an infection with local lesions, usually of the bowels and mesenteric lymph glands, associated with a peculiar toxæmia. In this it is analogous to typhoid and other infective fevers. Lung inflammation, pneumonitis, on the other hand, may be caused by many varieties of germs. Besides lung fever, "pneumonia," which is a pneumococcus pneumonitis, we may have streptococcus, staphylococcus, colon bacillus or typhoid bacillus pneumonitis and that due to other bacteriological forms. Septic pneumonitis is not rare, and in the infectious diseases complicated with pneumonia the processes may be pathologically an infection with any one or more of the before named bacteria. The local signs, however, and the clinical pneumonia of the different forms may be so much alike in the first days as to render diagnosis impossible, unless aid is afforded by the histological and bacteriological examination of the blood and pleural exudate. The author compares pneumonitis in this respect with cerebro-spinal meningitis. The recognition of the type of pneumonitis is important in prognosis and therapy. The diagnostic clue will, the author thinks, be found in the study of the blood in comparison with the clinical course of individual cases. The author records some cases as examples of the infectiousness of the disease to prove that the lung involvement is not always present and that pneumococcus infection of other portions of the body or of the blood may occur with or without lung involvement.—N. Y. Medical Journal.



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JNO. C. LeGRAND, M. D.,.....Editor and Prop.

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THE ALABAMA MEDICAL JOURNAL, Birmingham, Ala.

Birmingham and the Doctors.

This city is fast becoming an important commercial center. The coal, iron and steel interest is attracting the attention of the business men of the world. The influx of people for the past two years has been greater than at any time in the history of the city. Birmingham and the suburban towns contain more than 100,000 people. With this population comes a long list of medical men, many of whom are just from the medical colleges, and will go in and test their chances and build with the growth of the city. There are not a few who have recently located here, who have been in the practice elsewhere, but being attracted by what they believe to be a better and more lucrative field for work, have launched their boats in the current of the Magic City.

Observing for a number of years things medical and medical men, the conditions which now confront us locally, is a problem in which we are specially interested. To prophesy evil, or take a pessimistic view of the situation, would not be in accordance with our feelings. It is better to

look on the bright side, and have an abiding faith in the large resources with which we are surrounded, and hope that any doctor who has or may come will find Birmingham to be up to his expectations in every particular. We do not mean to say that, in our opinion, Birmingham needs more doctors at this time. To be candid, it is our opinion that the "jug is full to the brim;" but this is a free country, and if any physicians from any part of the country want to come, Birmingham is an American Metropolis, and therefore her gates are wide open to all good citizens, and the doctors are not excepted.

It is to be hoped that as our ranks are being filled, there will not be found a single man who will fail to enter into those ethical and fraternal relations which have characterized the profession in this city for so many years in the past, and up to the present. The doctor who practices any species of quackery, or who may for a moment think that he can maintain his affiliation with the regular medical profession by seeking to further his own professional interest, by following other than those rules and regulations which have so long been observed by the medical profession, will find that he will not succeed. It is not the province of this Journal, nor would we presume in any way to dictate to the medical profession, and in penning these lines we are not finding fault with any one, but we repeat: We are observing the situation with increased interest, and shall hope to see the medical profession in the future, as in the past, standing in one solid phalanx, every man ready to maintain those high and honorable principles which have been the guiding star of the medical profession of this city and of Jefferson county. And in the language of another: "May we all earn a little, spend a little less, be earnest, be kind, be honest, sincere, have a few friends, and these without capitulation, and may God bless us every one."

Dr. Hunter McGuire.

Dr. George Ross, of Richmond, Va., an intimate personal friend, speaking of the deceased at a late meeting of the physicians of the city of Richmond, said:

"Hunter McGuire, the gifted surgeon is dead! His name is part and parcel of American surgical history. It is the synonym for accuracy in surgical diagnosis and skill in surgical technique. Wherever the English language is spoken, and medical men gather for the discussion of surgical subjects, a quotation from his pen or tongue carries such conviction as few names could evoke. His personality was most charming, and, though singularly free from the grace of manner so coveted by many in social life, he won all hearts by his simplicity, his directness, his earnestness, his unostentatiousness. At various times of his life he was a professor in three

medical colleges, and died serving one. I feel safe in asserting that his strong personality and wide reputation were the most potential factors in the upbuilding of the University College of Medicine to its present conspicuous position. No teacher more instructive or more pleasing ever lectured to a class, and no man ever more genuinely enjoyed the affection and confidence of his pupils. In the amphitheatre they hung on his words, and when later on they became busy workers in professional life it was from him that they sought counsel by correspondence, and into his hands committed their obscure and complex cases for treatment. His generosity was limited only by the opportunities for dispensing it. His hand was always ready to do service for the poor and needy, 'without money and without price,' and his purse-strings were never tightened when the privilege of giving was extended to him. No man could count more on stauncher friends, and no man more richly deserved their confidence. He was gifted with rare executive ability and an irresistible personal magnetism. Without these qualities he could never have commanded the following that made it possible for him to empty the medical schools of Philadelphia of southern students in 1860, and subsequently to grow, step by step, with 'Stonewall' Jackson; to be the ideal medical director and organizer of the surgical department of the great army corps of that chief of heroes in modern military history. He measured up to every responsibility laid upon him, from the morning of life until the shadows of life's evening fell suddenly upon him. He began his career in this community after he had heard the requiem march sounding the death-knell of the Southern Confederacy on the field of Appomatox, and from the first day that he sought to serve this people until the day when he was driven speechless to his own door, stricken with paralysis in his buggy, save a needed summer vacation, there was no let-up in his work. He courted a generous rivalry, because it was a stimulus to the development of the genius of the possession of which he had an inner consciousness, but his character is untarnished by envy of his rivals' successes. His will was indomitable—his energy exhaustless. *Excelsior!* was his motto. *Excelsior* was the goal he attained to. Now he sleeps—fallen asleep in the shade beneath the trees of his quiet suburban home. Stilled for all time are his busy brain and tender heart and willing hands.

They've shrouded him—they'll bury him;
The dirge will cease its sounds;
The footsteps of the sorrowing
Turn sadly from the grounds.

They'll bury him—the soldier's friend
In days of bitter strife,

When sons of North and South, arrayed,
Fought for their nations' life.

They'll bury him whose earnest face,
When Peace had spread her wings,
Was messenger that gladdened homes,
So Hope about him clings.

They'll bury him—a noble son
Of famed Virginia's soil;
Physician born of classic mien,
High-bred, in God-like toil.

They'll bury him whose broad'ning fame
Begirts the lands and seas;
Who filled in every audience hall
The foremost place with ease.

They'll bury him—yes, mortal part,
But still his spirit lives,
And to the scientific world
Glad inspiration gives."

The Pan-American Medical Congress.

The following announcement for the coming meeting of the Pan-American Congress to be held in Havana, Cuba, December 26, 27, 28 and 29, 1900, has been received from the Secretary, Dr. Dhorms V. Coronado, of Havana:

Executive Committee—Drs. Juan Santos Fernandez, President; Gustavo Lopez, Vice President; Enrique Acosta, Treasurer.

Committee Members—Drs. Vincent B. Valdes, Jose I. Torralbas, Eduardo F. Pla, Thomas V. Coronado, Secretary.

The Secretary-General of the Executive Committee asks for professional co-operation in behalf of the third meeting of the Pan-American Congress.

He would be extremely pleased if you would favor him with your personal assistance, and also by interesting your Medical Societies, Universities and Medical Schools, as well as prominent colleagues who are teaching the medical sciences, so that they will take part in the Congress, and will send delegations, the members of which should forward their papers or titles according to the enclosed instructions.

The extraordinary impulse which experimentation and that multitude of auxiliary sciences whose progress amazes us has given to modern

medicine affords the young American numerous advantages for study and investigations in the solution of many and varied problems that relate to the pathology and the pathogenesis of the numerous diseases.

"Our climate, our soil and the grade of civilization itself to which we have arrived produce appreciable modifications in the diseased conditions that develop in an atmosphere so distinct from that of Europe, and the diseases belonging to these altitudes, the study of which is being perfected each day, are sufficient motives to authorize the scientific investigations of our Congress. In these controversies the combined efforts do not represent the sum of the units that compose them, but represent the multiplication of them. The simultaneous work of all investigations of the Americas presented and discussed at a given time surely must produce surprising results in reference to the utility and the practical application of the scientific productions of the men who cultivate the medical sciences on the American continent.

"Each Medical Congress enables us to make progress in an effective way in the study of the laws of epidemiology, the preventive indications, the modifications that stamp the time, or the social surroundings in the medical topography of each territory, the quarantine, isolation, etc.—in a word, everything that relates to the progress of medical work up to date.

"I sincerely hope that our sister nation whose medical attainments are so famous, will co-operate in promoting the success of the Third Pan-American Congress by sending the largest possible representation, both in delegates and scientific productions.

"I beg that you will mention in your reply the persons who will take part, and will send your papers at your earliest possible convenience.

Very truly yours,

(Signed)

Dr. Thomas V. Coronado.

Secretaria de la Commission Ejecutiva del Tercer Congreso Medico Pan-Americano, Prado 105, Habana, Cuba.

The folder postal cards to be sent to the various members of the Pan-American Congress are worded as follows:

"Notice"—I have the honor to invite you to take part in the Third Pan-American Congress which will meet in Havana on the 26th, 27th, 28th and 29th of December, 1900.

I beg you to reply whether you desire to be present and how many persons will accompany you, the invitation being extended to ladies. The committee hopes to obtain considerable reduction in the traveling rates and for this reason needs to know beforehand the number of prospective visitors, and their place of residence. Awaiting the earliest possible reply, I am, yours respectfully,

T. V. Coronado,

Secretary of the Committee on Organization.

Form of Reply:—Sr. Secretario, Dr. T. V. Coronado, Prado 105, Havana, Cuba.

Name
 Address
 I will be present at the Congress
 I will present a paper entitled

I will send an abstract of the paper before November 16th.

General Regulations:—The members of the Congress will consist of any physicians of the Western Hemisphere, including the Antilles (West Indies) and Hawaii that comply with the special regulations of registration or lend their services to the Congress in the capacity of foreign members.

International Executive Committee:—This committee will be nominated by the Committee on Organization, and will consist of one member from each country represented in the Congress. The members of this committee will hold permanent tenure of office, except when one of them fails to be present at a meeting, in which case his office will be declared vacant, and the vacancy will be filled by an election held by the members registered from his country. In case that there is no representative whatever from that country, the members of the International Committee present should determine the course that ought to be taken.

The following will be considered the constituent countries of the Pan-American Medical Congress: The Danish, French, Dutch and English Antilles (West Indies), Cuba, Puerto Rico, Argentine Republic, Bolivia, Brazil, Canada, Chili, Columbia, Costa Rico, San Domingo, Ecuador, United States, Guatemala, Hayti, Hawaii, Honduras, Mexico, Uruguay and Venezuela.

The sections of the Congress will be the following: (1) Medicine; (2) General Surgery; (3) Military Medicine and Surgery; (4) Obstetrics; (5) Gynecology and Abdominal Surgery; (6) Therapeutics; (7) Anatomy; (8) Physiology; (9) Pediatrics; (10) Pathology; (11) Ophthalmology; (12) Laryngology and Rhinology; (13) Otology; (14) Dermatology; (15) General Hygiene and Demography; (16) Marine Hygiene and Quarantine; (17) Orthopedic Surgery; (18) Mental and Nervous Diseases; (19) Dental and Buccal Surgery; (20) Medical Jurisprudence; (21) Medical Pedagogy; (22) Railway Surgery.

Languages:—Article 9. The official languages of the Congress will be English, French, Spanish and Portuguese.

Carbolic Acid.

Much study has been given of late years to the uses and dangers of carbolic acid. It is regarded as a most excellent remedy when administered internally, and as a spray in destroying germs. It is also extensively used as an antiseptic in the practice of surgery.

For many years it has been known to produce death when taken internally, and many cases of suicide have been reported as a result of its use.

For several years it has been known, by the discovery of Dr. Powell, of New York, that alcohol is the true antidote to carbolic acid. The latest discovery, however, as to carbolic acid, is that when it is applied locally, even in weak solutions, it is capable of producing gangrene and local death of the parts to which it is applied. This is at least true as to its effect on the extremities.

Reasonable Compensation.

Since the epidemic of smallpox which has prevailed during the past twelve months in every section of Alabama, no one can certainly fail to see the importance of an organized Board of Health in this State, and when the General Assembly meets in December there should be no trouble in having passed a bill authorizing the expenditure of a sufficient sum of money to properly execute the health laws of the State.

The State Board should have at its command a contingent fund sufficient to control all quarantine regulations in time of an epidemic, and every county health officer should be paid a reasonable salary for his services.

Negroes Partially Immune.

At a recent meeting of the Calhoun County Medical Society, Dr. P. H. Brothers, who has been actively engaged in the practice of medicine for probably fifty years, in reading a paper on "Intestinal Diseases of Children," made the statement that the negro race is practically immune from the disease of cholera infantum. He stated that in a practice of many years, which includes a number of years practice during the time the negroes were slaves, that he has seen only a few cases of cholera infantum among negro children, while he has seen many cases among children of the Caucasian race.

No member of the Calhoun County Society had ever seen this question discussed by any of the medical authors or by the medical press, and it opened up to them a new question for thought.

Of ten members present, only one had ever seen a case of cholera in-

fantum in the negro. One of the members present stated that for several years he did a contract practice where there were about three thousand negroes, many of whom had families, and he never saw a case of cholera infantum among them, though he had never thought of it until the question was raised by Dr. Brothers in his paper.

Dr. Brothers did not attempt to give any reason for the fact that the negro race seems to be practically immune from this intestinal trouble, neither did he claim any originality in the suggestion which he made, but the members of the profession present all believe that his suggestion was one which would be regarded as new to medical literature, and one which is well founded.

We confess that we have not made an exhaustive research as to the originality of the question raised by Dr. Brothers, neither are we prepared to say to what extent cholera infantum prevails among the negro race, and we make the foregoing statements for the purpose of eliciting a discussion of this question by members of the profession.

And, in this connection, we wish to say that we will appreciate it if members of the different county societies will write us of anything of interest which occurs in their meetings.

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The speedy recovery succeeding the employment of Tyree's Antiseptic Powder in Leucorrhea and Gonorrhea, exemplifies the wisdom of using a rational remedial agent designed to accomplish a definite purpose rather than

experiment with mendaciously exploited cure-alls.

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Miscellaneous Notes.

New Orleans Polyclinic.—Physicians will find the Polyclinic an excellent means for posting themselves upon modern progress in all branches of medicine and surgery. The specialties are fully taught, particularly laboratory work. Fourteenth annual session opens November 12, 1900. For further information address Dr. Isadore Dyer, Secretary, New Orleans Polyclinic, New Orleans, La.

Dr. E. H. Sholl is spending several weeks in New York.

Dr. C. Willson, of this city, is spending several weeks in Baltimore and New York.

Dr. C. Trevis Drennen, of Hot Springs, Ark., has been in the city for several days.

Dr. Jacob M. DaCasta died September 11th, 1900. His book on medical diagnosis is among his best works.

We are gratified to receive so many remittances and renewals on subscription. It shows the Journal is appreciated.

If we fail to supply the demand for sample copies of the Journal, it is because the demand is greater than the supply.

Those who object to cremation as a method of disposing of the dead will not be so much prejudiced if they study the situation at Galveston.

Dr. J. D. Gibson has opened a sanitarium on the corner of Fifth avenue and Twenty-first street. The half-page announcement in this issue of the Journal calls special attention to the class of patients which the Doctor proposes to treat.

Dr. I. N. Love, editor of the Medical Mirror, one of the best known doctors in the country, has removed to New York, where he is to be Professor of Medicine in the Post Graduate School. Dr. Love will do good work, and his influence will be felt in this school.

Dr. W. C. Farmer, of Paris, Texas, was in the city during the month on a visit to his uncle, Dr. M. H. Collins, of North Birmingham. Dr. Farmer has been in Europe for several months, and promises to give the readers of the Journal some of his observations while abroad.

Dr. Phicque proposed at the Congress of Hygiene in Paris to establish an additional tax of a penny upon alcohol for the benefit of the tuberculous. The tax upon alcohol is fully justifiable, Dr. Phicque thinks, upon the ground that alcoholism is the principal cause of consumption.—Exchange.



DR. W. E. B. DAVIS.

Dr. Davis was elected President of the American Association of Obstetricians at the recent meeting held in Louisville, Ky. This is a high honor, bestowed upon a gentleman who is worthy of such distinction. The Doctor's many friends in Birmingham and the State of Alabama will join the Journal in extending to him their congratulations.

Dr. W. L. Heflin, of Randolph county, who is 73 years old, and still an active practitioner of medicine, has annual reunions of his family every year. During the month of September he and his family and a number of friends spent about ten days at their summer resort on the banks of the Tallapoosa river. Dr. Wyatt Heflin, of this city, and Dr. Howell P. Heflin, of Bessemer, enjoyed the outing and report having had an unusually good time.

A number of the physicians of the city are considering the question of having a bill introduced in the Legislature making it unlawful for a druggist to sell morphine or cocaine except on a prescription from a reputable physician. The alarming extent to which this evil is growing makes it necessary that some action be taken to prevent such a dangerous and nefarious practice. It is also being discussed that a law should be passed compelling corporations to pay the full amount collected from the laborers to the physicians who may be employed to practice for the employes of said corporations.

Dr. J. C. Kempter was recently granted a license to practice in the State of New Jersey, the examining board of that State having granted license upon the examination by the Maryland State Licensing Board. The New Jersey board has thus discretion in the case of an applicant who presents proof of the academic and medical education required by the laws of New Jersey, together with the license issued by another State board after an examination of the same grade and kind as that required in New Jersey.

When Governor Goebel was shot at Frankfort, Ky., Dr. McCormack, hearing of the occurrence, was one of the first persons to go to the assistance of the injured man. Dr. McCormack had long been a close friend of Goebel's, and, realizing at once that the popular sentiment resulting from the assassination would move the legislature to decide the contest by declaring Goebel governor, McCormack devoted himself to the task of keeping the man alive, though the wound was clearly mortal. Dr. McCormack refused to render a bill for his services on the ground of personal friendship. The brother of the dead governor, Arthur Goebel, has filed a claim of \$10,000 against the estate for Dr. McCormack. If any of our readers remember at Atlantic City, in June, the tall fellow with smooth face, who made very proper and pungent comments upon the foolish paper on smallpox by a man from Tennessee, that man was McCormack.—Maryland Medical Journal.

As the season when fevers are most prevalent is at hand, we cannot urge upon physicians too strongly the importance of having sufficient

Viskolein on hand for immediate use. We would also suggest that druggists be notified of the importance of having plenty of Viskolein in stock, and not get out. We mention this now because of the hundreds of letters and telegrams we have received in the past, urging a supply sent at once.

The Viskolein Co., 221 Fulton St., N. Y.

W. B. Saunders & Company announce that they are about to establish a branch of their business in Great Britain. Mr. Saunders has recently spent several weeks in London, where all the arrangements preliminary to the opening of an English house have been completed.

This London branch will be operated in immediate connection with the home establishment, and the same methods that have been so successful in building up the business in this country will be employed in the conduct of this new branch.

The details of the various departments of the firm's affairs have now been developed to such a state of perfection that the house feels the time has come for extending its field of operations. For a number of years Saunders' books have been sold in England, through the agency of a London publisher, and, although they have already met with remarkable favor, the house is confident that by applying to the English market the same policy that has proved so successful at home, the sale of its publications in Great Britain and her colonies can be enormously increased.

There is a physician in West Philadelphia who has a son one year old, and this baby is probably the strongest human being for its age and weight in the world. Its father will hold a cane in his two hands and the baby, grasping it, will draw itself up to its chin three times. That is but one of its numerous feats of strength. The physician says that his boy's unusual muscular development is due to a daily massage treatment. Every morning he lays the little fellow, naked, on a blanket and kneads his muscles for thirty minutes. Once a month he weighs the baby and measures its calves, chest, arms, etc. The monthly increase of weight and girth is remarkable. The baby has never had shoes or stockings on its feet, or a hat on its head, and in the summer it wears only a little sleeveless dress that comes to its knees. It gets a cold bath every morning. "If nothing goes wrong," the physician often declares, "this child will be one of the strongest men the world has ever seen. He will never get bald, and he will never lose a tooth. As for his muscles, with massage and a course of exercise that I have laid out, they will be big and supple all over his body. All his flesh will be, when tense, as hard as steel, and when relaxed, as soft as the flesh of a young girl."—Philadelphia Record.

THE SOUTHERN SURGICAL AND GYNECOLOGICAL ASSOCIATION.

Following is the preliminary program of the thirteenth annual meeting of the Southern Surgical and Gynecological Association, to be held in Atlanta, Ga., on November 13th, 14th and 15th, 1900:

- 1—President's Address—A. M. Cartledge, M. D., Louisville, Ky.
- 2—Trans-Peritoneal Drainage—L. S. McMurty, M. D., Louisville, Ky.
- 3—A new method simplifying the treatment of complicated Fibroid Uteri and severe cases of Pelvic Inflammatory Disease—Howard A. Kelly, M. D., Baltimore, Md.
- 4—A report on a Case of Osteo-Fibro-Myoma of the Uterus—Geo. Ben Johnston, M. D., Richmond, Va.
- 5—The Open Treatment in Suppurating Forms of Appendicitis—Jos. Price, M. D., Philadelphia, Pa.
- 6—Aneurism of the Abdominal Aorta (Cœliac Portion) Laparotomy; Isolation of Sac and wiring with twelve feet of silver wire; Electrolysis four and one-half hours. Death on nineteenth day, with remarks—Rudolph Matas, M. D., New Orleans, La.
- 7—A Flap Operation for Atresia of the Vagina, with illustration—Geo. H. Noble, M. D., Atlanta, Ga.
- 8—Epi- and Hypospadias with special reference to their Operative Treatment—F. W. Parham, M. D., New Orleans, La.
- 9—Tuberculosis of the Female Pelvic Organs and their treatment—Jos. Taber Johnston, M. D., Washington, D. C.
- 10—An Operation for Rectal Stricture—L. M. Tiffany, M. D., Baltimore, Md.
- 11—Value of Thereapeutic Test in Two Cases of Syphiloma resembling Osteosarcoma—W. E. Parker, M. D., New Orleans, La.
- 12—Gastroenterostomy—F. T. Meriwether, M. D., Asheville, N. C.
- 13—Limitation in Abdominal Surgery—T. J. Crofford, M. D., Memphis, Tenn.
- 14—Early Excision for Dislocations not Reducible by Manipulation—W. F. Westmoreland, M. D., Atlanta, Ga.
- 15—A study of Intra-Cranial Lesions—Hugh M. Taylor, M. D., Richmond, Va.
- 16—Carbolic Acid in Surgery—Seneca D. Powell, M. D., New York.
- 17—Drainage in Abdominal Surgery—J. W. Long, M. D., Salisbury, N. C.
- 18—Fracture of the Shaft of Humerus Complicated with Dislocation—N. P. Dandridge, M. D., Cincinnati, O.
- 19—Etiology of Ovarian Dermoids—W. D. Haggard, Jr., M. D., Nashville, Tenn.
- 20—An operation devised for the Cure of Marked Rectal Prolapse in Women—J. Wesley Bovee, M. D., Washington, D. C.

- 21—Three cases of Extra-Uterine Pregnancy—Walter B. Dorsett, M.D., St. Louis, Mo.
 - 22—The Removal of Cystic Gall-Stones—Howard A. Kelly, M. D., Baltimore, Md.
 - 23—Autointoxication from Defective Kidney Elimination, with and without Nephritis—Jas. T. Jelks, Hot Springs, Ark.
 - 24—Pseudo-Membranous Enteritis, and its Relation to Surgery of the Abdomen—Frank A. Glasgow, M. D., St. Louis, Mo.
 - 25—The Surgery of the Gasserian Ganglion—Wallace Neff, M. D., Washington, D. C.
 - 26—Some Life Saving Measures in Obstetric Work, with Cases—R. R. Kime, M. D., Atlanta, Ga.
 - 27—Anæsthesia by Sub-Arachnoid Injection of Cocaine and Eucaine—W. L. Rodman, M. D., Philadelphia, Pa.
 - 28—(a) Supplementary Report on Case of Litholapaxy. (b) Supplementary Report on Case of Vesico-Rectal Fistula—Geo. S. Brown, M. D., Birmingham, Ala.
 - 29—(* * * *)—A. J. Coley, M. D., Alexander City, Ala.
 - 30—Appendicitis in the Female—Floyd W. McRae, M. D., Atlanta, Ga.
 - 31—Cases of Ectopic Gestation—Jas A. Goggans, M. D., Alexander City, Ala.
 - 32—Traumatic Gangrene—J. B. Murfree, M. D., Murfreesboro, Tenn.
 - 33—Solid Ovarian Tumors—John G. Earnest, M. D., Atlanta, Ga.
 - 34—True Conservatism in the Management of Uterine Fibroids—Samuel E. Milliken, M. D., Dallas, Texas.
 - 35—Report of a Case of Abdominal Pregnancy, with Specimen—R. B. Rhett, Jr., M. D., Charleston, S. C.
 - 36—Surgical Treatment Immediately Following Labor, with Report of cases—W. L. Robinson, M. D., Danville, Va.
 - 37—Retro-Flexed Incarcerated Gravid Uterus—Wm. A. Quinn, M. D., Henderson, Ky.
 - 38—Exsection of External Carotid Artery in Inoperable Malignant Disease of the Face, with Report of Cases—Wm. Perrin Nicolson, M. D., Atlanta, Ga.
 - 39—Vesico Vaginal Fistulæ—M. C. McGannon, M. D., Nashville, Tenn.
 - 40—Splenectomy, with Cases—W. E. B. Davis, M. D., Birmingham, Ala.
- A. M. Cartledge, M. D., President.

W. E. B. Davis, Secretary.

Dipsomania—Being a stimulant to the peptic and hydrochloric glandular system of the stomach, and exercising at the same time a sedative action upon the engorged mucous membrane—three chlorides Henry—is especially serviceable in those forms of dyspepsia and unequalled for

the impaired appetite, nausea, morning vomiting and other symptoms accompanying dipsomania.—Medical Essays:

The meeting of the Southern Surgical and Gynecological Association will be held in Atlanta November the 13th, 14th and 15th, under the Presidency of Dr. A. M. Cartledge, of Louisville. Prospects are splendid for successful session. Members of the medical profession are cordially invited to attend.

Very sincerely yours,

W. E. B. Davis.

D. T. Hudgens, M. D., Elizabeth, Ark., says: I have used S. H. Kennedy's Extract of *Pinus Canadensis* in leucorrhea with very good results. I have had under my treatment Mrs. S., age 33 years, for leucorrhea, with intversion of the uterus. I used the White Extract per vagina as a local treatment for the leucorrhea, and the treatment was attended with success. I am satisfied that *Pinus Canadensis* should occupy a prominent position in our materia medica.

Derangement of the functions of the Glandular System disturbs metabolism and health is impossible until the missing secretion is supplied to the economy. In some instances supplying the element is necessary for a time only, in others it must be persisted in.

The wonderful results produced by the Suprarenal Capsules in hay fever and asthma; by the Thyroids in goitre, myxoedema, cretinism, fibroid tumors and various skin diseases; by the Bone Marrow treatment in anemia, chlorosis, marasmus, rachitis and malaria, and the Ovarin and Parotid Extracts in ovarian troubles have suggested to practitioners the idea that many intractable diseases of obscure origin may be benefited by the organotherapeutic agents.

Physicians desiring to experiment may obtain from Armour & Company samples of their preparations.

Messrs. Armour & Company showed at the Paris Exposition their Pepsin, Pancreatin, Thyroids, Suprarenal Capsules, Extract of Beef and Soluble Beef, and were awarded a gold medal.

AN ADDITIONAL HONOR.

We have just been advised of the award by the judges of the Paris Exposition, to Messrs. Wm. R. Warner & Co., of Philadelphia, New York and Chicago, of the highest medal prize, for their justly celebrated pharmaceutical products. This makes the 17th World's Fair highest prize which has been awarded this well known and justly celebrated firm, and we join in congratulations to Messrs. W. R. Warner & Co. over their well merited and unbroken line of victories in competition with the world's manufacturers.

SUBSTITUTION AS IT AFFECTS THE DOCTOR.

Much has been written regarding the effects of substitution; however, we doubt if the physician has carefully considered how this evil directly affects him. For instance, if he has been in the habit of prescribing some well known and reliable remedy, from which he has derived most satisfactory results, there may possibly come a time during his experience when the preparation seems to lose its former action. When this takes place he usually attributes it to deterioration of the remedy, or the physiological condition of the patient. Yet, if an investigation were made, it would be found that some unscrupulous person had substituted an article which he claimed was "just as good and cheaper." It is a well known fact among the pharmaceutical trade that as soon as certain remedies have proven their value they are immediately imitated by other manufacturers, who hope to thus gain the benefit of the reputation and effort made by the manufacturer of the legitimate article. This point has been carried so far that certain manufacturers not only steal the ideas of the original manufacturer, but bodily take for their own use

Five Kingsbury Pianos

Go to the A. C. F. College,
Tuskegee, Alabama.

Another Victory for America's Famous Piano!

After investigating various other makes of pianos, Dr. John Massey has given his order for five handsome Kingsbury Pianos, to be used in the A. C. F. College, which is one of the leading industrial institutions in the South.

IT WAS NO LEAP IN THE DARK, for the Kingsbury has been used in a number of Colleges near home for several years, and Dr. Massey knew its reputation. Among these are "The Cox Female College," College Park, Ga.; "Southern Female College," LaGrange, Ga.; "Tuscaloosa Female College," Tuscaloosa, Ala.; "Anniston Female College," Anniston, Ala.; "Southeastern Agricultural College," Abbeville, Ala.; "Agricultural College," Wetumpka, Ala.; "Gordon Institute," Barnesville, Ga.

I give them all as references as to the high quality of the world renowned Kingsbury. Write for prices.

E. E. FORBES, Sole Agent,

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literature pertaining to the original article and substitute the name of their own preparation in place of that of the article for which the communication was intended. This does not only show lack of originality on the part of the imitator, but it should be a warning to physicians that the goods manufactured by concerns of this kind are unreliable and untrustworthy as their methods of doing business. We have at this time a particular case in mind. Owing to the peculiarity of Micajah's Medicated Uterine Wafers, which is based upon their therapeutic efficiency, a host of imitators have sprung up. These pirates not only use similar sounding names, but bodily appropriate the literature pertaining to Micajah's Wafers, and insert their name in place of the original name. Caution should be exercised that in prescribing a Uterine Wafer, "Micajah's" should be indicated and not a substitute.

TUBERCULOSIS INTERITIS.

The treatment of catarrhal inflammations of the bowel in tuberculous patients is attended with considerable difficulty. The digestion of phthisical persons is so readily disturbed that very great care must be used in selecting remedies which will have no irritating effect upon the gastro-intestinal tract. For this reason the use of the ordinary astringents is often contraindicated. An exception, however, must be made in the case of tannopine, which, owing to its insolubility in the gastric fluids is completely devoid of any disturbing influence upon the stomach. Aside from its astringent action upon the intestinal mucous membrane, tannopine also has disinfectant properties. The first reports as to the value of this drug in tuberculous enteritis were from Ebstein's Clinic in the University of Goettingen (Schreiber, *Deutsche Med. Wochenschrift*, No. 49, 1897). The best results were obtained in the milder cases in some of which it entirely arrested the diarrheal passages if given in doses of 60 grains daily. In the Imperial General Hospital of Vienna equally favorable observations have been made by Dr. Carl Fuchs (*Times and Register*). In one of the cases of advanced phthisis the stools were reduced from four to one a day, and in another in which the patient had five stools daily, the diarrhea was completely arrested. Dr. E. Doerberger (*Annals of Gynecology and Pediatrics*, July, 1900), has been equally successful with its use; so that tannopine may be regarded as a very promising symptomatic remedy in this class of cases.

NEURASTHENA AND GENITAL DISEASE.

Since the first accurate description of neurasthenia by Dr. Beard this disease has been made the subject of numerous careful clinical studies, especially in America where it seems most prevalent.

It has been found that this condition may be due to a variety of causes

and it becomes necessary therefore to determine the exact etiological factor in every case in order to adopt a successful line of treatment. In a very important group of cases in women the chief exciting cause is disease of the generative organs, the neurasthenic symptoms being dependent upon reflex disturbance of the central nervous system due to the local irritation. The treatment of this class of patients must, of course, be particularly directed toward the removal of the local trouble, in connection with the employment of such hygienic regulations and internal remedies as will improve the state of the nervous system.

Among the topical measures for the removal of irritation, congestion and inflammation of the genital organs, Micajah's Medicated Uterine Wafers are especially adapted for this class of cases. These patients are apt to be made worse by severe operative procedures. On the other hand, as the wafers are easily applied, unirritative and cleanly, patients do not object to them, and their use is promptly followed by relief of the local symptoms, and, in many instances, by a permanent cure, without the necessity of surgical intervention.

EVERY PHYSICIAN

Has a certain class of patients who worry him a good deal, for while not being exactly ill or confined to their beds, they are always complaining of a feeling of depression, loss of energy, restlessness, insomnia, and a general feeling of "je ne sais quoi;" and while these symptoms may indicate a certain form of neurosis or nervous debility, he is at a loss as to what to prescribe, for while there are numerous remedies for nervous diseases he is often puzzled as to which to use. It is in this class of cases that **CELERINA**, a combination of Celery, Coca, Kola and Viburnum, is indicated, for while not acting as an unnatural stimulus, it soon restores the tired and jaded nervous system to its normal condition, and brings about a feeling of buoyancy and energy that will be pleasing and surprising to both physician and patient, and will induce him to confirm the verdict of his brethren all over the world as to the virtues of this preparation. It is put up in elegant and palatable form, and being made of the best material in large quantities, it is always uniform and certain in its results.

RIO CHEMICAL CO., St. Louis, Mo., U. S. A.

THE EFFECT OF CODEINE.

The Medical Record (March 3, 1900) quotes the following from an article by Dr. G. J. Lochboehler in the Journal A. M. A. (Dec. 2, 1899): In epidemic bronchitis codeine is a valuable remedy for the relief of the harrassing pain of the cough, and when combined with one of the coal-tar antipyretics, the analgesic effects become more pronounced. It is a favorite drug in the cough of phthisis and chronic bronchitis, and its sedative influence is highly satisfactory, clinical data having shown it to be the best succedaneum for opium. Another advantage of codeine over morphine derivatives and one of special value in bronchial affections, is that the patients not only cough less, but also expectorate more easily than after taking any of the morphine derivatives. The cough-dispelling power of codeine is such as to make it indispensable in phthisical patients, and a point of great importance in these cases is that it does not impair the appetite or digestion, never produces nausea, and can therefore be used uninterruptedly for months. For many bronchial and laryngeal neuroses, the exhibition of codeine in combination with antikamnia (antikamnia and codeine tablets) meets with well merited sanction.

CASE OF ULCERATIVE COLITIS.

By T. J. Biggs, M. D., Stamford, Conn.

George H., age 32, American. Diagnosis: Ulcerative Colitis.

The patient was admitted to the hospital May 2, 1900; had been a sufferer for some three months, and during that time was under the care of a rectal specialist in New York; but in spite of this, got no better, and the condition steadily grew worse. He said that at the time of the beginning of the condition, it commenced with a slight diarrhœa, loss of appetite, nausea, and a slight continuous fever. At the end of a week he began to have considerable pain on pressure along the transverse and descending colon, also termina about the umbilicus, burning pain in the rectum with the sensation of the presence of a foreign body, and a constant tenesmus. He said the stools for the first few days contained more or less fœcal matter, but they soon changed to greenish, tough, transparent mucus, containing some blood and pus. During the formina, nausea and vomiting were present; the urine was scanty and highly colored, and the number of stools ranged from 5 to 20 in the 24 hours. At the end of a week he said he was so weak that he could not leave his bed.

On entering the hospital he was greatly emaciated, and so weak that he had to be carried from the ambulance to his bed. Examination shortly after his entrance showed the presence of a mild general peritonitis which was chronic in form. He had been living on peptonized milk and various other prepared foods, but was able to retain but very little

of it, and what he did retain distressed him greatly and gave him but feeble nourishment. His temperature was 101.5, pulse 122; microscopic examination of the blood showed only 150,000,000 red cells to the cubic millimetre, with a greatly decreased quantity of hæmaglobin and an increase in the white cells.

The patient was put on bovine, half a teaspoonful in lime water every hour. Also rectal injection of bovine, one ounce once in 24 hours, the object of this high injection being twofold: First, to bring about a reparative process of the mucous membrane of the bowel, and to render the lower part of the tract aseptic. He began to improve almost from the first. This treatment was continued up to May 7th, when the quantity of bovine was increased to two teaspoonfuls every hour, in sterilized milk and lime water. The rectal injections were given once in 48 hours, and two ounces employed instead of one.

May 12th the bovine was increased to a tablespoonful every two hours and the rectal injections reduced to an ounce again and employed every third day. At this time he was free from pain; the peritonitis had subsided, temperature was normal, pulse 99, evacuations were about three to four in 24 hours, not painful, containing no blood or pus, but some mucus. He had a desire for food, and when allowed some light and easily digested diet, retained it without any inconvenience, and seemed to relish it.

On the 20th, the bovine was increased to a wineglassful every two hours, and rectal injections of bovine pure were employed once in 24 hours.

On the 25th he was up and about, feeling, as he expressed it, "first rate;" had gained some nine pounds in weight, color was good, pulse and temperature normal, defecations two in twenty-four hours, no pain, slight trace of mucus. He was allowed a light general diet, and the bovine continued as before.

On June 1st he was discharged, cured.

This case I deem of especial interest, for it was a well-defined case of ulcerative colitis in an advanced stage and had resisted the most approved methods of treatment. Under the blood treatment, it began to improve from the very first, and went on to an absolute cure without a single interruption.

It gives me great pleasure to highly commend this most valuable preparation in the treatment of all these chronic bowel conditions. I have seen old rectal ulcers that had resisted all treatment heal rapidly and within a comparative short time. Another thing of great interest is that the mucous membrane when treated with bovine seems to be absolutely restored to normal, leaving not the semblance of a cicatrix. There is no danger of a ptomaine poisoning from the bovine, as it is an absolutely sterile preparation, the nutritive principles being rapidly absorbed,

so that within an hour after their application, nothing is left at the site of the application but the antiseptic principles and immediate topical nutritive effect of the preparation.

COD LIVER OIL IN NERVE AND TISSUE WASTE.

Physicians who question why Cod Liver Oil should be given in preference to other fats should remember the well-known fact that the oxidizing, heat-producing and nutritive properties of Cod Liver Oil are greater than any other hydrocarbonaceous substance and that when taken in proper form, its remarkable diffusibility through animal membrane facilitates its absorption. It should, however, be given as an emulsion, physiologists having demonstrated that fats must undergo minute sub-division (emulsification) in the digestive process, or else be in such state before ingestion, before they can be absorbed. Milk (Nature's emulsion) illustrates this, and it is held that the more closely the Cod Liver Oil resembles milk in fineness and uniformity of oil globules, the greater its efficacy and the more it must appeal to the intelligent practitioner.

Some, disgusted with the many worthless oil compounds, advocate the plain oil, trusting, notwithstanding the difficulty attending its digestion, enough may be retained and absorbed to produce effect; but it has been shown that except in occasional cases it passes off, unchanged, through the bowel. It must not be overlooked that the greater the need for this oil, the less capable the digestive tract to prepare it for easy assimilation.

In children convalescing from acute infectious diseases, whooping cough, bronchitis, and similar affections, oil or fats are always indicated, nor need we dwell upon the fact that in scrofulosis, rickets and other diseases of malnutrition, there is nothing better than Cod Liver Oil, and it has always been relied upon in pulmonary tuberculosis.

The indication of fats and phosphates (in conjunction) is recognized in neurasthenia, nervous prostration and allied states, and the formula of the Phillips' Cod Liver Oil Emulsion with the Soluble Phosphates as found in wheat, shows its specific value in such conditions, as also wherever Cod Liver Oil is demanded. It is a perfect Nerve and Tissue liquid-food and, we believe, the only Emulsion acid in reaction, and having a high percentage of chemically unchanged oil. It is too widely known to need particular mention here.

We have been favored with a very original and novel photograph demonstration of this Emulsion, which should interest our readers, as it has us, and we are authorized to say that on request, The Chas. H. Phillips' Chemical Co., New York, will take pleasure in sending them to those wanting to know more in detail the claims of Phillips' Emulsion to being the rational form for administering Cod Liver Oil.

If you write for one of these, please mention this Journal.

SANMETTO IN CYSTITIS AND PROSTATIS. ALSO IN GRAVEL.

I used a bottle of Sanmetto upon myself. I was suffering with cystitis and prostatitis and received some relief. I think by continuing its use it will effect a cure. My age is sixty-five years; not so easily cured as younger persons. We have a man in town by name, J. S. K., who had been suffering with gravel for years, and had spent much with physicians. He used Sanmetto, and it would be hard to believe the amount of calculi that passed in a few days; in fact it was disintegrated and passed so rapidly that he was forced to stop the medicine for several days. If desired, he will report the case himself.

Judsonia, Ark.

J. Y. DeShong, M. D.

SOME NOTES ON THE USE OF MECUROL: A NEW REMEDY IN URETERITIS.

By Ramon Guiteras, M. D.,

Professor of Genito-Urinary Surgery in the Post-Graduate Medical College of New York; Lecturer on Genito-Urinary Surgery in the University of the City of New York.

(Abstracted from *The Lancet*, London, England, Sept. 22, 1900.)

The author states that he has thoroughly tried Mercurool in his clinic, and from his experience has drawn certain conclusions which he presents in this paper. After describing the chemical nature of Mercurool he states that he found the weaker solutions had little effect and the stronger solutions were at first irritating. He finally concluded that the average strength best borne by the patient is ten grains to the ounce, or approximately two per cent. After having reached this conclusion he had the histories of 100 cases recorded, in 33 of which an examination for the gonococcus was made, revealing its presence in 30 cases. In the remaining 67 cases, a clinical diagnosis was depended upon, since the writer considers the experienced eye competent to recognize the disease. In one extremely interesting case no gonococcus could be found in the urethral discharge, although gonococci were present in that of some venereal ulcers on the glans.

In these cases a two per cent. solution of Mercurool was ordered, which the patients were directed to inject three times a day, after micturition; the injection to be held within the urethra for five minutes at each operation. The clinical reports of the cases show that frequently in two days after beginning the use of Mercurool, gonococci could no longer be found in the discharge.

The author discusses at some length the value of the term "practically cured," and sums up his argument by saying that to draw conclusions of value we should consider only cases that have been under treatment

for three or more weeks, omitting those making but a few visits. On this basis he eliminates all but 65 cases from his report, and tabulates these as follows:

Ten cases were cured in four weeks, or 15 per cent.; fifteen cases were cured in six weeks, or 23 per cent.; twenty cases were practically cured, as there was no discharge, though there were some shreds in the urine at the end of from four to eight weeks, 30 per cent.

One of the most valuable observations that the writer has made is the fact that only two cases suffered from complications, one having developed gonorrheal rheumatism and the other epididymitis. He states that this fact in itself would tend to argue much in favor of the use of Mercuriol, for where is there any other solution or mixture which does not show a greater percentage of complications? When we consider that many writers claim that epididymitis occurs in 20 per cent. of all cases of urethritis, the rate of 1 per cent. reported in this series of cases argues much in favor of Mercuriol as a harmless, yet efficient, injection.

Another interesting feature is that in only one of the 100 cases was there any marked posterior urethritis. Therefore it would seem that Mercuriol quickly destroys the gonococcus, lessens the severity of the inflammation, and tends to prevent the development of complications. From a comparative study of the different methods of treating gonorrhea the author concludes that treatment with Mercuriol is an advance beyond the older methods with balsamics and astringent injections.

CASE OF EXTREME ANAEMATOSIS.

By T. J. Biggs, M. D., Stamford, Conn.

Mary W., age 27 years, entered Hospital January 12, 1900. Diagnosis: Anæmatis. The patient gave the following history: Three weeks previous to entering the hospital, she said that she began to feel badly, first suffering with increased languor and pallor, and at the end of ten days the muscular weakness compelled her to take to her bed. She had had cardiac palpitation, dyspnœa, attacks of syncope, œdema and swelling about the ankles, with petechial spots scattered irregularly over the surface. On entering the hospital her appetite was wanting, she suffered with nausea and vomiting associated with marked dyspepsia and diarrhœa. She had a remittent fever, the temperature ranging from 102 to 104 F.; she had some slight disorder of vision in the left eye. The cardiac sounds were feeble and associated with soft basic and anæmic murmurs; the spleen and liver were normal in size; the blood examination showed no increase in the white blood corpuscles, but a decidedly reduced quantity of hæmaglobin and of the red blood cells. So advanced was her condition, and the patient so feeble, that I gave her family a very unfavorable prognosis. She was put in a darkened room and kept

absolutely quiet, and bovine commenced, 20 drops in grape juice every half hour. The first three doses she retained nicely, the fourth and fifth she vomited. I therefore decided to discard grape juice, and gave her bovine in lime water and peptonized milk, one-third lime water and two-thirds peptonized milk. From this time on she had no difficulty in retaining it.

January 14th, the bovine was given a teaspoonful every hour. On the 16th her diarrhœa had ceased, as well as the dyspeptic symptoms, and she said she felt much stronger. The fever at this time did not go over 101 1-2. On the 22d the bovine was given a tablespoonful every two hours, in lime water and peptonized milk, alternating with Burgundy wine. On the 26th she was feeling stronger, and had not for 24 hours suffered any cardiac palpitation. The bovine was now given a wine-glassful in peptonized milk, plain, every three hours, and a light liquid diet, such as boullions, gruels, etc., allowed. On the first day of February she was sitting up in bed, feeling stronger, and the extreme pallor had disappeared. Her temperature had been normal for three days, no cardiac palpitation or dyspnœa, and the nausea and vomiting had entirely ceased. On the 7th the vision in the affected eye was normal. On the 9th the patient was allowed to leave her bed for two hours, at the end of which time, although slightly fatigued, she said she felt greatly improved. On the 16th the patient still showed improvement, the pallor having almost disappeared and the petechial spots had cleared up, and she was able to walk about without becoming exhausted. On the 19th she went for a little walk on the veranda and was up about five hours. On the 20th she walked a quarter of a mile. On returning she seemed fatigued, but felt well. On the 25th, on account of family reasons, she left the hospital, feeling as she expressed it "well."

She was instructed to continue the bovine and return from time to time for examination. Examination of her blood on the day of her leaving the hospital showed the hæmoglobin to be almost normal in quantity, and the red corpuscles to be a fraction short of 3,000,000 per cubic millimetre.

This case will be watched and a later report made. I deem this of great interest, for the simple reason that the prognosis invariably in this condition is unfavorable, and the treatment usually employed by the physician is a symptomatic one which simply acknowledged that with the ordinary medication the doctor only hopes to prolong life by retarding the condition. While I do not as yet claim a cure, I do say that the rapid improvement in this case was not only remarkable, but as far as I am able to know, unparalleled, and as no medication outside of some little stimulant accompanied the bovine, we can certainly attribute the result to that and nothing else.



FOOD FOR THE SICK AND HOW TO PRESCRIBE IT. With a Chapter on Food for the Baby. By Edwin Charles French, M. D., Louisville, Ky.

This little book is full of many valuable suggestions which the physician will find very helpful in prescribing a proper diet for the sick. The author calls attention to the fact that the receipts are carefully selected from those contributed by the profession and the heads of the nursing service of various hospitals throughout the country, each having been practically tested.

ATLAS AND EPITOME OF GYNECOLOGY. By Dr. Oskar Schaefer, Privatdozent of Obstetrics and Gynecology in the University of Heidelberg. Authorized Translation from the Second Revised and Enlarged German Edition. Edited by Richard C. Norris, A. M., M. D., Surgeon-in-Charge Preston Retreat, Philadelphia, Etc. With Two Hundred and Seven Colored Illustrations on Ninety Plates, and Sixty-two illustrations in the Text. Philadelphia: W. B. Saunders & Co., Publishers. Price, \$3.50.

The illustrations in this book and the explanatory text are especially valuable to the gynecologist. The student will find this a splendid aid in the study of any special case. Every physician who is interested in gynecological work should buy a copy of this book. It is worth many times the price.

A TREATISE ON MENTAL DISEASES, Based Upon the Lecture Course at the Johns Hopkins University, 1899, and Designed for the Use of Practitioners and Students of Medicine. By Henry J. Berkley, M. D., Clinical Professor of Psychology, the Johns Hopkins University, Chief Visiting Physician to the City Insane Asylum, Baltimore, and With Frontispiece, Lithographic Plates and Illustrations in the Text. New York: D. Appleton & Co. 1900.

The author in his introductory note states that the absence from the English medical literature of a comprehensive, practical work on mental

diseases—one adapted to the needs of the busy practitioner as well as to those of the student of psychiatry—was led to the preparation of this treatise, which embodies a consideration of all the principal forms of psychical disturbance.

Those who know Dr. Berkley well know of his ability to prepare a treatise on mental diseases, and those who do not know him, will be assured that he is thoroughly equipped to teach on mental diseases by the position which he holds in the Johns Hopkins.

This work by Dr. Barkley is divided into three parts: (1) the anatomy and histology of the central nervous system; (2) general pathology; (3) clinical forms of mental diseases; and under these three general heads can be found anything which will be useful to members of the profession in diagnosing or treating mental diseases. The book consists of six hundred well printed pages, and thoroughly and completely covers the field for which it is intended.

ELECTRICITY IN GYNECOLOGY AND THE PRESENT RELUCTANCE OF GYNECOLOGISTS TO USE ELECTRICITY.

R. Newman, New York, basing his conclusions on his own experience and on reports contained in the literature on the subject, believes that we obtain better results from treatment by electricity than by other means, and that the reluctance of gynecologists to apply electricity, or at least to recommend it, has not been explained. The art in applying electrolysis successfully in gynecology consists in: (1) using the correct strength of the galvanic current; (2) applying the poles to the right place; (3) selecting the size and material of the electrodes; (4) timing the duration and intervals of the seances. Electrolysis applied with a mild current will cause absorption only, while a strong current will burn, and even destroy tissues. The operator must know what effect he desires to produce, and then graduate the strength of the current accordingly. The writer has always succeeded better with mild currents, and prefers to use the mild current a longer time if necessary. Applying the correct pole in the right place means particularly using the positive pole for stopping hemorrhages, while the negative pole will absorb the fibroid tissues. Needles are not used, but a blunt platinum sound is introduced into the uterus, which is pushed by degrees into the tumor, sometimes to the depth of eight or ten inches. For the abdominal electrode nothing suits better than pottery clay, which must be kept warm, smooth, and moist; its size should be about twelve by twenty inches. The duration and intervals of the seances must be regulated by the indications. Fibroid tumors, pelvic cellulitis, peritonitis, peri-uterine hematocoele, strictures of the female urethra, oöphoritis, and salpingitis, are some of the conditions which have been successfully treated by this method.—Medical Review, St. Louis.

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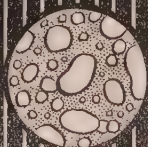
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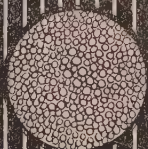
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Abstracts.

OFFICE DISPENSING.

There have been advanced pro and con many arguments relative to the desirability of the physician dispensing his own medicines. The nature of these has been varied, vascillating between those of a purely business and pecuniary bearing on the one hand, and those of an ethical tincture on the other. The question is of such a perennial and abiding nature that most medical men have been obliged to practically settle it for themselves in one way or another, and for reasons that seem to them competent and expedient, if not wholly decisive from the respect of a general principle. A spirit of self-defense has served as the chief factor in the conclusion of some, while others have been equally guided in their action by a sense of responsibility, in assuming the duties of dispensers as well as prescribers. It can readily be understood that, under circumstances of jealous rivalry, or combinations of competing effort or inefficiency of one kind or other, a conscientious practitioner even otherwise disposed might hesitate to trust the welfare of his patient and himself to any other than his own supervision. Especially is this likely to be the case in small towns and villages where there is little or no opportunity for choice. Where there is no apothecary or druggist, the question necessarily resolves itself into one of personal necessity. Then again, there are those who consider it a matter of education for themselves, and a convenience if not a duty to their patrons to be able to at once and without loss of time adjust the remedial agents to the needs of the case. The former of these positions is unquestionably a tenable one, and the latter has much in favor of its justice and convenience. In the former instance it may be argued that the individual who manipulates his own weapons must come to know them better and handle them to better advantage. He is more likely to change or vary them oftener when required, and to watch their action more closely and become more familiar with the varying shades of influence following changes in dosage and combination. There can be no question, in the opinion of the writer, that this is true, and that much that is now left to the laboratory experimenter and clinical observer in the more concrete dispensary centres, was more effectively accomplished in times past by the men who themselves prepared and closely watched the action of essences from the roots and herbs of the forest and field. As to the desirability of this habit from the second point of view, it is only necessary to point to the degree of confidence and satisfaction evinced by the patient and friends where the physician proceeds to at once dispense what he wishes in the case, and to the unanimity with which that feature of homeopathic and kindred practices is publicly indorsed.

But aside from the classic arguments reiterated in the foregoing brief resume, there is one of more recent development and growing import that is bound to have its weight in determining the future status of office or personal dispensing. That is the tendency of the patient, if not the druggist, to usurp the prerogative of the physician and re-prescribe for him or herself. This is without doubt becoming one of the greatest evils of the time and one before which the dangers of the use of patent medicines sinks into insignificance. In consequence of the general intelligence, perhaps, or the curiosity or reading habit of the laity, a prescription is seldom written that cannot be and is not at once read by the patient and its contents noted. In this way he readily familiarizes himself with the nature of what he is taking, and the result is that if he feels the better for it he is more than likely to continue its use, or possibly abuse, oblivious or careless as to remote consequences. In this way doubtless is often inaugurated the opium, chloral, cocaine and other reprehensible and debauching drug habits. As a matter of fact the welfare of both patient and physician dictate the necessity for keeping the subject in absolute ignorance of what he is taking. In no other way can these prevalent evils of which we speak be held in subjection, and seemingly in no other way can that be accomplished than by the physician himself furnishing to the patient just what he desires him to have, and when, and insisting upon it as his right and duty to dictate the terms of its administration at all times and under all circumstances. This, to our way of thinking, is one of the strongest arguments that can be advanced in favor of the physician dispensing his own medicine, and keeping the patient and all else in absolute ignorance of the nature of the influences under which he is placed. We have long been favorable to the system of office dispensing, and the more we see of the growing tendencies of the time the more impressed are we with the necessity for some of the safeguards which it undoubtedly affords. The only real effective objections to the habit are those based upon the economy of the practitioner's time, and the more important matter of the protection which is sometimes afforded by the corrective knowledge of the pharmacist, and the availability of a written record in the event of malpractice claims. While of undoubted great weight, these objections seem not as insuperable as are the detailed evils which accompany and follow the indiscriminate habit of prescription circulation and self-medication that at present prevails. —Peoria Medical Journal.

DIGITALIS IN THE TREATMENT OF HEART DISEASE.

Dr. W. H. Washburn, in Merck's Archives, says: "The action of digitalis is upon muscular fiber, causing it to relax more slowly and to contract more quickly and perfectly. Its effects are not alone limited to

the heart, but extend to the muscular system in general. Digitalis increases blood pressure and converts the intermittent circulation in the capillaries into a steady flow. The increased blood pressure lessens the rapidity of the heart's action, as well as does the action of the drug upon the vagus. The whole amount of blood in the arterial system is increased, and there is a corresponding lessening of the amount in the veins. This stimulates the absorption of serous exudates. The myocardium, like other tissues of the body, receives an increased blood supply, and consequently its nutrition improves, thus favoring compensating hypertrophy. Digitalis is not contraindicated in aortic regurgitation and full pulse. The administration of digitalis is much hampered by fear of its cumulative effects. This is a real danger, as it is a drug that is absorbed slowly, and elimination is by no means rapid. In consequence we may have a chronic or acute intoxication if the doses are small and administered at short intervals. Chronic poisoning by digitalis results in contracted arterioles and in increase of resistance in the peripheral circulation. The coronary arteries, in common with other arterial trunks, share in this condition, and consequently, as a result of too free administration of the drug, the nutrition of the myocardium is lessened, with a consequent aggravation of the heart failure.

The dose of digitalis that will prove tonic to the heart is a moderate one; this dose must only be repeated after a sufficient interval. If the dose be excessive and the intervals between the doses too short, unfavorable results may follow. A fair dose of general application is the use of one grain of the powdered leaves, or its equivalent in any of the official preparations, administered once in twelve hours. This is a dose that can be continued for months or years without saturating the system. Such doses may not produce the immediate results which are so often desired by the friend of patients, but under its administration a feeble, almost imperceptible pulse gradually improves, with a corresponding amelioration of the general symptoms. If large doses are employed, symptoms of saturation should be looked for, which is shown by a slowing of the pulse-rate, lessening diuresis, and more rarely diarrhea.—*Indian Lancet*.

DOUBLE EXTRA-UTERINE PREGNANCY: SUCCESSIVE RUPTURE OF THE TWO SACS.

A young woman of 28, who had had three previous miscarriages, was sent to the hospital with the diagnosis of placental retention after a two-months' miscarriage. Two days later symptoms developed which led to the diagnosis of ruptured extra-uterine pregnancy. In view of a tendency of the hemorrhage to become encysted nothing was done. Fifteen days later, with every appearance of good health, the patient was

suddenly taken with violent abdominal pains and ballooning of the belly. The diagnosis of rupture of the hemorrhagic sac was made with fresh bleeding and peritoneal bloody accumulation. Laparotomy revealed a recent hemorrhage arising from the pavilion of the left tube. On the right side numerous adhesions circumscribed a sac containing old clots and the tube dilated and ruptured on its posterior surface for a distance of three centimetres. There was no doubt of extra-uterine pregnancy on the right side. Microscopical examination of the left tube in addition to the appearances of the pavilion, the ovary and the clots demonstrated and the existence of a tubo-peritoneal extra-uterine pregnancy.—Drs. Boissard and Coudert, in *Le Progres Medical*, July 7, 1900.

BACTERIOLOGICAL EXAMINATION OF THE FLUID OBTAINED BY QUINCKE'S LUMBAR PUNCTURE.

By Dr. Giovanni Donzello.

The purpose of this research was to determine the value of bacteriological examinations of the cerebrospinal fluid in the diagnosis of meningeal injections. The writer's experiments were conducted on dogs, and he employed cultures of different species of germs, some endowed with great motile powers, others absolutely non-motile. He began with the bacillus of typhoid fever. The skull of a dog was trephined under aseptic precautions and half a cubic centimetre of broth culture of the bacillus was injected under the dura by means of a hypodermic syringe, after the withdrawal by means of another syringe of an approximately equal amount of cerebro-spinal fluid, in order that the amount of liquid in the cerebrospinal space might remain the same. The opening in the cranium was carefully closed, and at intervals of two, three, six, or nine hours after the operation, lumbar puncture was performed in the four animals. The fluid thus obtained was examined bacteriologically. The agar plates prepared with this cerebrospinal fluid were kept in incubators for forty-eight hours and the following results noted: The bacilli of typhoid fever did not reach the spinal cavity until three hours had elapsed after the inoculation into the subdural space. After six hours they were present in the spinal cavity in moderate numbers, after nine hours they began to diminish in number, and in eleven hours they had disappeared. The writer performed similar experiments on dogs with cultures of the bacillus of anthrax, and found that after six, nine and twelve hours, respectively, no bacilli were found in the spinal cavity, as attested by the plate cultures prepared from the fluid obtained by lumbar punctures. In four other dogs the writer performed similar experiments with *Staphylococcus pyogenes aureus* and *Staphylococcus pyogenes albus*. In these animals he found the germs in the spinal cavity three, six, and nine hours after the operation of trephining, and a somewhat smaller number were present

after twelve hours. In order to prove his experiments and to eliminate the possibility of a disturbance in the condition of pressure in the cerebrospinal liquid, he next repeated the entire series of tests with solid agar cultures instead of broth cultures injected into the subdural space. He concludes from all these experiments that when the subdural space is infected with a germ against which the animal is immune, the organism finds its way into the lumbar portion of the spinal cavity with difficulty. The reverse is true in the experiments with germs which are pathogenic in the animals. The motility of the germ has no relation to the time of its appearance in the lumbar region, for there was no appreciable difference between the time of appearance of the typhoid bacillus, which possesses a very marked degree of motility, and that of the *Staphylococcus aureus*, which is non-motile. The reason of this is to be found in the fact that in the presence of cerebrospinal fluid the motility of the bacillus of typhoid fever gradually diminishes until it almost stops. This may be readily seen in a hanging-drop preparation in which the bacillus is mixed with cerebrospinal fluid.—New York Medical Journal.

ATROPHIA (?) VULVÆ WITH PRURITUS.

Dr. J. Montgomery Baldy, of Philadelphia, in association with Dr. Williams, presented this report. He said that the first symptom noticed was usually an intense itching and burning of the vulva. The skin was frequently discolored and small red spots appeared on the surface. Then a peculiar superficial shrinking of the vulva took place. The disease might be either unilateral or circumscribed. As it advanced the labia minora became fused into the labia majora, the orifice became more and more contracted, and all sexual intercourse became absolutely impossible. Even after recovery from this disease, the contraction of the vulva remained. The pathological examination of previous cases showed that the sebaceous glands had disappeared, and that the sweat glands were almost entirely wanting. Here and there were small areas of round cell infiltration. In the case just reported microscopical examination showed atrophy in some and hypertrophy in other portions of the skin. The inflammatory action was slight. The outer layers of the corium were pale and slightly oedematous, the elastic fibers being indistinct and deprived of their wavy outline. Small round cells were found in the large collections beneath the epidermis. In some places the corium appeared dense and sclerotic. The etiology was still in dispute. Some had supposed the affection to be syphilitic, but the very fact of its rarity would seem to exclude this. From a review of their own case, especially from a consideration of the constant pruritus at the beginning, they had been led to believe that the cause was a local one.—Woman's Med. Journ.

THE INTERDEPENDENCE OF TRUTHS.

But few people appreciate the close interdependence existing between truths that seem wholly unconnected in character and scope. A study of the history of the advancement of science would quickly show to an analytic mind that most great discoveries obtain their first suggestion from some remote and apparently disconnected fact, and that the instruments by which progress in any science is made are, as a rule, the product of discoveries in some other branch. Truth everywhere interblends with truth, like the warp and woof of a piece of cloth; so that the various divisions of science, instead of being as many think representative like divisions in nature, are but ingenious classifications for human convenience. It certainly seems a long distance from cream of tartar or tartaric acid, to fundamental questions in philosophy and theology. No druggist, in weighing out five cents' worth of cream of tartar, thinks for a moment that he is handling the very cross of modern philosophy in its war with atheism and materialism. In the meeting lately held at Bristol, England, by the British Association for the Advancement of Science, Prof. F. R. Japp, President of the Chemical Section, took up the question of vital force in his annual address, resurrecting from the drawers of the drugstore the old contention concerning vital force. Nor did he do it as a joke. He was in dead earnest and presented such an array of convincing and apparently invulnerable evidence, that materialistic science has been in a flutter ever since and with no champion willing to come to its defense. He has resolved the whole subject into the geometry of molecular and crystallographic structures.—Mercks' Report.

SALT STARVATION IN EPILEPSY.

Richet and Toulouse announced, at a recent meeting of the Paris Academy of Sciences (November 20th, 1899), that their experience with 30 female epileptics has demonstrated the fact that depriving the nervous system of the usual amount of salt in the blood renders the nervous tissue more susceptible to the absorption of medicinal salts which it takes up to a remarkable extent, thus rendering an extremely small dose effective. Thus 2 grains of sodium bromides a day, administered under the conditions referred to, arrested the epileptic attacks, sometimes in less than a week, no matter how frequent they had been before. Several patients had shown no recurrence for six months since treatment. Richet proposes to call this the metatrophic method, and suggests that it may possibly apply also to affections treated with quinine, digitalis, atropine, etc., as well as those in which the alkaline salts are administered. The saltless food has no bad effect on the patient.

THE MODERN TREATMENT OF DIABETES MELLITUS (DR. R. SAUNBY).

After reviewing the modern theories of the causation of diabetes, and excluding the transitory cases, the writer classifies all cases as being either of nervous, pancreatic, or hepatic origin. He defines diabetes as a persistent or recurrent glycosuria which sooner or later is accompanied by thirst, polyuria, and failure of nutrition. The first step in the treatment of this disease should be to ascertain the effect of withdrawing all carbohydrate food, in order to determine how much carbohydrate food the patient still retains the power to assimilate. The writer gives the number of heat units (in food) that a man needs during rest and exertion, and also an example of an average non-carbohydrate diet for a patient requiring 2,400 heat units a day. The greatest difficulty arises from the need to deny diabetic patients both bread and potatoes. Six ounces of potatoes are enough for one meal, and would enable the patient to dispense altogether with any bread substitutes. Bread is best given in the form of toast, but as an ounce at a meal is as little as a patient can do with, and as this is equal to 1,000 grains of sugar a day, he is better without it. Alcohol should be given in the form of Scotch whisky or light wines. Where the patient seems to handle small amounts of carbohydrates with safety, certain "extras" may be permitted. Examples of diets containing these extras are given, and cases are reported showing the results of their use. Finally, the writer gives a very useful table showing the carbohydrates or sugar-forming substances contained in various articles of diet which may be used in limited quantities by diabetic patients.—Lancet.

MOUNTAIN TOOTHACHE.

The Physician and Surgeon says: "We are still far from correctly understanding the influence on the human organism of changes in climatic conditions and variations of atmospheric pressure, and there is a wide field of useful research in this direction. *La Medicine Moderne* tells us that a curious malady, which is apparently due to influences of this kind, has been lately observed by M. Hafner, of Zurich, among the engineers engaged in the construction of the railway on the Jungfrau. At the end of the first eight or ten days after commencing work, each newcomer is seized with extremely violent pains in several teeth on one side of the jaw, accompanied by swelling of the gums and inflammation of the tissues of the cheek. The affected teeth are exceedingly sensitive to pressure, and mastication becomes very difficult. The pains increase up to the third day, after which they diminish gradually, and cease at the end of six or seven days. After their disappearance there remains no trace of the previous affection or troublesome sequelæ of any kind,

and no alteration can be detected in the teeth. Mr. Hafner considers that the trouble is a phenomenon of acclimatization. He points out that the men working on the railway are obliged to remain constantly in an altitude of nearly 300 metres, and in each case the same interval elapses between arrival and the manifestation of symptoms. When once the attack is over there appears to be no tendency to recurrence."—Information.

MASSAGE IN SKIN DISEASES.

Massage in the treatment of skin diseases encourages the circulation, induces more active nutrition, and materially assists in the removal of diseased tissues, infiltrations, and effusions by increasing molecular changes by means of mechanical stimulation. As usually performed, however, it is in many cases an unpleasant duty, and consequently seldom carried out so regularly or thoroughly as it ought to be. I have found that in a great many cases the massage can be sufficiently well performed by using an India-rubber roller instead of the hand, thus avoiding unpleasant contact with the skin. I have now recommended this method in skin cases for some time, and find it answers admirably. It is easy of application, and can be applied largely by the patient, though the back must be massaged by some other person. The roller I usually recommend is the ordinary roller used in photographic work, and there are others made which act equally well.

Another method of stimulating the skin in isolated patches is by the use of a blunted Volkmann's spoon or by a curette, both of which instruments I have used with benefit. This method, however, is best applied to the face and neck, and can only be performed by the surgeon. I have found it of great value in obstinate cases of acne and psoriasis and localized indurations.—Tibbles.

THE ABUSE OF QUININE.

The use of this drug as a panaceal tonic, and antipyretic is strongly inveighed against by W. F. Church, in the Buffalo Medical Journal for September. He appears to prove that it lessens leucocytosis and diminishes the size and oxygen capacity of the red blood cells. Foster's Therapeutics is cited as authority for the statement that 44 grains in divided doses in fifty hours produced death in one instance, and 12 grains caused amaurosis. Headache, tinnitus and erythema, often with desquamation, are common symptoms. The legitimate indications for the drug, according to Cushny, are in malaria, some cases of leucemia, febrile conditions when temperature is falling, and various forms of periodic neuralgia and headache. In 1898 there were imported 20 grains of quinine to every man, woman and child in the United States.